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THE IMPACT OF CULTURAL FACTORS ON POST-ACQUISITION INTEGRATION

DOMESTIC AND FOREIGN ACQUISITIONS OF FINNISH COMPANIES IN 1993-2004

Helsinki 2008
The Impact of Cultural Factors on Post-Acquisition Integration: Domestic and Foreign Acquisitions of Finnish Companies in 1993-2004

Key words: merger, acquisition, national culture, organizational culture, post-acquisition integration

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1 INTRODUCTION

1.1. The Mergers and Acquisitions Phenomenon

In 2006, global mergers and acquisition (M&A) activity reached a record level of USD 3.8 trillion\(^1\). The most notable deals included Bell South’s acquisition of AT&T for USD 89 billion, EON’s USD 71.4 billion bid for Endesa, and Suez’s USD 41 billion merger with Gaz de France. In Finland, the M&A volume resulted in EUR 33 billion in 2006 (Talouselämä, January 12, 2007). The largest deal involving a Finnish company was the merger between Nokia Networks and Siemens Networks, which resulted in a combined turnover of EUR 16 billion (Talouselämä, January 12, 2007).

The popularity of mergers and acquisitions shows that acquisitions are a central component of corporate strategy. Acquisitions can contribute to competitive advantage by offering possibilities for cost reductions and for revenue enhancements. The most often stated motive in acquisitions is synergy realization (Gaughan 2002). Other motives include new market access (Trautwein 1990), knowledge transfer (Ahuja & Katila 2001, Finkelstein & Halebian 2002, Gammelgaard 2004, Haspeslagh & Jemison 1991, Karim & Mitchell 2000), and organizational learning (Björkman, Tienari, & Vaara 2005, Gupta & Roos 2001, Karim & Mitchell 2000).

Research on merger and acquisition motives is important in understanding how initial motives are related to acquisition outcomes. However, it is equally, if not even more important, to understand what happens after the actual acquisition deal. Authors within the process perspective suggest that post-acquisition integration plays a critical role in determining acquisition success or failure (Haspeslagh & Jemison 1991, Saxton & Dollinger 2004). Post-acquisition integration is defined as the making of changes in the functional activities, organizational structures, and cultures of the two organizations to facilitate their consolidation into a functioning whole (Pablo 1994).

Several factors impact the outcome of post-acquisition integration. Two main ones are strategic and organizational fit. Strategic fit is the degree to which the acquired firm complements the acquiring firm’s strategy (Jemison & Sitkin 1986) and to which additional value is created (Larsson & Finkelstein 1999). Organizational fit is the compatibility of administrative practices, leadership styles, structures, and cultures between the acquiring and the acquired firm (Jemison & Sitkin 1986). Whereas a considerable amount of research has been conducted in connection to strategic fit, researchers have only recently begun to analyze issues related to organizational fit (Stahl & Sitkin 2005).

Researchers within the cultural perspective on acquisitions argue that the cultural aspect is the most important dimension of organizational fit. With the rapidly increasing popularity of foreign acquisitions\(^2\), cultural factors have become extremely important. In foreign acquisitions, double-layered acculturation is needed, which refers to the need to

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\(^2\) The global volume of foreign acquisitions reached an all time high of USD 1.3 trillion in 2006 (The Economist, Jan 11, 2007).
integrate not only two different organizational cultures but also two national cultures (Barkema, Bell, & Pennings 1996). This has been reflected in the increasing amount of studies during the past decade that take a cultural perspective on acquisitions (Cartwright & McCarthy 2005).

1.2. Research Gap

Although acquisition studies have increasingly begun to include cultural aspects (Cartwright & McCarthy 2005), recent literature reviews indicate that our understanding of cultural factors and their impact mechanisms remains incomplete (Stahl & Voigt 2005; Teerikangas & Very 2006). In the following, I identify three research gaps within the cultural perspective on acquisitions.

i. Incomplete understanding of differences between domestic and foreign acquisitions

Shimizu, Hitt, Vaidyanath & Pisano (2004) argue that there has been little research on foreign acquisitions, given their increasing popularity and importance. While foreign acquisitions have much in common with domestic acquisitions, they also have unique differences (Shimizu et al. 2004). One of the challenges for studies on foreign acquisitions is to systematically establish the differences between domestic and foreign acquisitions along strategic and organizational aspects, including culture. The results of previous studies remain highly fragmented and inconclusive. Some studies suggest there is a lower strategic and organizational fit in foreign acquisitions (Bühner 1991, Krug & Hegarty 1997) whereas other studies propose that there is a better strategic and organizational fit in foreign acquisitions (Swenson 1993, Harris & Ravenscraft 1991). Nonetheless, a third group of studies has found no significant differences between domestic and foreign acquisitions (Lubatkin, Calori, Very, Veiga 1998, Very, Lubatkin, Calori 1996, Larsson & Lubatkin 2001). A better understanding of the differences between domestic and foreign acquisitions is vital in order to evaluate the extent to which domestic acquisition theories are applicable for foreign acquisitions.

ii. Lack of acculturation factors and dynamic process factors in quantitative studies

Most quantitative studies within the cultural perspective have been static by nature. For instance, most studies on organizational cultural differences concentrate on the static differences between the companies before the acquisition took place. Focus on static cultural differences in quantitative studies has lead to relatively little research on other cultural factors.

King, Dalton, Daily, and Covin (2004), Stahl and Voigt (2005), and Teerikangas and Very (2006) encourage researchers to take a broader view by examining additional cultural factors, such as acculturation factors, and process dimensions related to culture, such as cultural integration. Acculturation factors are derived from the acculturation theory (Berry 1980, Nahavandi & Malekzadeh 1988) and include multiculturalism, organizational cultural preservation, and attractiveness of the partner. Cultural integration involves developing an organizational culture with compatible value
systems by combining the cultures and managerial viewpoints of the acquiring and the acquired firm (Shrivastava 1986).

Although acculturation and cultural integration factors have been explored in theoretical papers (Nahavandi & Malekzadeh 1988, Shrivastava 1986), qualitative studies (Elsass & Veiga 1994, Lodorfos & Boateng 2006), and discursive approaches (Riad 2007, Søderberg & Vaara 2003a, Vaara, Tienari, & Säntti 2003), their impact on post-acquisition integration remains under-explored in large-scale empirical studies. Hence, a thorough quantitative examination of the impact of acculturation factors and dynamic cultural factors can contribute to the existing literature.

iii. Contradictory findings related to the impact of cultural differences on post-acquisition integration

The quantitative research stream within cultural perspective on acquisitions has specifically examined the influence of cultural differences on post-acquisition outcomes. These studies have resulted in highly contradictory findings. Support has been found for negative, positive, and insignificant relationships between cultural differences and acquisition performance (see literature reviews of Stahl & Voigt 2005 and Teerikangas & Very 2006).

One reason for these contradictory findings is that previous quantitative studies, with but few exceptions (Very et al. 1996, Very, Lubatkin, Calori, & Veiga 1997, Weber, Shenkar, & Raveh 1996), have included only one level of culture – typically either national or organizational culture. In order to better distinguish the effects of national and organizational cultural differences, both levels should be included.

Another explanation for the contradictory findings is the focus on direct linear effects in previous studies. However, the contradictory findings of previous quantitative studies suggest the presence of more complex relationships. Therefore, there is a clear need to discover more complex influence mechanisms of cultural differences, such as mediating and moderating variables and possible curvilinear relationships.

1.3. Research Aim

Against the background of the discussion above, the overall aim of the thesis is to map out and illustrate the impact mechanisms of cultural factors in post-acquisition integration in order to explain the cultural aspects of acquisitions. Through a thorough quantitative analysis, I aim to explain differences in cultural factors between foreign and domestic acquisitions. In addition, I statistically model and test hypotheses related to acculturation and cultural integration in order to quantitatively show their importance in acquisitions. Furthermore, my goal is to uncover impact mechanisms that shed light to the contradictory results related to cultural differences in previous quantitative studies.
Consequently, the research questions in this study are:

- *How do domestic and foreign acquisitions differ in strategic and organizational aspects (including culture)?*

- *How do acculturation factors – such as multiculturalism, cultural preservation, and partner attractiveness – impact post-acquisition integration?*

- *How does cultural integration – including cultural change and building a new shared culture – impact post-acquisition integration?*

- *How do cultural differences impact post-acquisition integration at national and organizational cultural levels?*

1.4. Structure of the Thesis

I start by presenting an overview of acquisition literature in Chapter 2. This is followed by a discussion on the impact of culture in acquisitions in Chapter 3. Chapter 4 includes a description of the data collection process and a presentation of the statistical analysis methods used in the empirical part. Chapter 5 contains summaries of the essays. Finally, in Chapter 6, I summarize and discuss the main research findings, suggest avenues for further research, and present managerial conclusions.
OVERVIEW OF ACQUISITION LITERATURE

In this chapter, I present an overview of acquisition literature. First, I begin by defining the concept of acquisition. Second, I briefly discuss acquisition motives to provide an understanding of why acquisitions take place. Third, I reflect on different acquisition outcomes that have been used to measure the performance of acquisitions. Finally, I discuss the role of the post-acquisition integration process in determining acquisition outcomes and present different theoretical perspectives on post-acquisition integration.

2.1. Definition of Acquisitions

The terms merger and acquisition are often used interchangeably. Haspeslagh and Jemison (1991) argue that distinctions between mergers and acquisitions are largely in the eye of the beholder. Compared to acquisitions, mergers are a small phenomenon. According to a UNCTAD (2000) estimate, only 3% of all mergers and acquisitions were actually mergers (quoted in Buckley & Gauri 2002 and Teerikangas & Very 2006). In addition, some mergers are acquisitions in disguise. In mergers publicized as “mergers of equals”, one of the parties is often in control and the term “merger” is used for political reasons to avoid the seeming dominance of one firm (Piekkari, Vaara, Tienari & Säntti 2005). Examples include DaimlerChrysler and Arcelor Mittal. True “mergers of equals” are rare because of the difficulties in maintaining a genuine balance in the power disposition (Vaara & Tienari 2003, Zaheer, Schomaker, & Genc 2003). Teerikangas and Very (2006) criticize the fact that loose definitions of mergers and acquisitions have lead to an ill-defined focus in merger and acquisition studies. Further, Nummela (2005) argues that there is a clear difference between the two concepts. To avoid terminological confusion, this study focuses on acquisitions. An acquisition is defined as one company taking a controlling interest (over 50%) of another company, regardless of the sizes of the companies (Butler, Ferris & Napier 1991). The term merger tends to be used for the combination of equal-sized firms (Haspeslagh & Jemison 1991), in which neither party can clearly be seen as the acquirer (Søderberg & Vaara 2003b). A domestic acquisition is defined as an acquisition in which the headquarters of the acquirer and the acquired firm are in the same country. A foreign acquisition is defined as an acquisition in which the headquarters of the acquirer and the acquired firm are located in different countries (Shimizu et al. 2004). Previous research

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3 In the Daimler Chrysler case, Daimler promised that the deal would be a “merger of equals”. However, Daimler soon dominated (Kühlman & Dowling 2006). In the Arcelor Mittal case, an Arcelor executive was first appointed the Chief Executive, as a part of “merger of equals”. Three months after the merger, Lakshmi Mittal, former Mittal CEO, ousted Mr. Junck and became the chief executive of Arcelor Mittal. The balance of power shifted in the favor of Mittal. (The New York Times, Nov 7 2006)

4 The corporate headquarters’ location is used as a proxy for the nationality of the firm. In most cases, it reflects the firm’s history and national identity. For example, Nokia and Kone have their corporate headquarters in Finland, L’Oreal and Danone in France, Wal-Mart and P&G in the US, and Henkel and Siemens in Germany. Different criteria could also be used based on the geographical focus of the operations, ownership, place of stock-market listings, or place of registration. For the purpose of this thesis, the definition based on the location of the corporate headquarters was chosen because it has been used in previous acquisition studies (Shimizu et al. 2005, Nummela 2005) and effectively discriminates between domestic and foreign cases in the empirical sample.
has also used the terms “cross-border acquisition” (Datta & Puia 1995, Krug & Nigh, 1998), “international acquisition” (Datta & Puia 1995, Weber et al. 1996) and “multinational acquisition” (Brock, 2005) to refer to foreign acquisitions.

Due to a considerable overlap in the use of terms “merger” and “acquisition” in previous studies, I draw on both merger and acquisition literature in the theoretical part, as acquisition literature can benefit from advances in merger literature. In the empirical part, the unit of analysis is acquisition.

2.2. Acquisition Motives

From an economic and financial perspective, acquisitions can be viewed as investments. The goal in investments is \textit{value creation}.\footnote{Value creation is defined as a positive net present value from an investment. Value creation depends on the future cash flows generated by the investment and on the risk associated with the future cash flows (Schweiger and Lippert 2005).} Value creation in acquisitions is explained by two main theories: efficiency theory and the resource and knowledge-based view.

\textit{Efficiency theory} focuses on the planning and execution of \textit{synergies}\footnote{Synergy is defined as a combination of the acquiring and acquired firms in which the combination is more valuable than the sum of the parts (Gaughan 2002).} (Trautwein 1990). Synergy is the most frequently mentioned motive for acquisitions (Gaughan 2002). Applying Porter’s (1985) generic competitive strategies, Capron (1999) and Gaughan (2002) divide synergies into revenue-enhancing and cost-reducing synergies: \textit{Revenue-enhancing synergies} are based on finding a way through which both firms’ expertise and assets can be combined to create extra value. \textit{Cost-reducing synergies} result from \textit{economies of scale} – lower unit costs due to increased volume – and \textit{economies of scope} – use of one set of inputs to provide a broader range of outputs. Schweiger and Lippert (2005) present two additional synergies: \textit{Market power synergies} are defined as the increased market power that results from the consolidation. \textit{Intangible synergies} encompass intangibles such as brand name and knowledge management.

According to the \textit{resource-based view}, resources are a source of competitive advantage if they are valuable, rare, hard to imitate, and non-substitutable (Barney 1991, Mahoney & Pandian 1992, Wernerfelt 1984). Closely related to this, the knowledge-based view focuses on the role of a specific resource – knowledge – as a source of competitive advantage (Conner & Prahalad 1996, Grant, 1991). The dynamic capabilities approach focuses on the firm’s ability to integrate, build, and reconfigure internal and external competences (Teece, Pisano & Shuen 1997). Knowledge and organizational learning are considered increasingly important motives for acquisitions due to recent trends based on resource and knowledge-based views and the dynamic capability approach (Ahuja & Katila 2001, Finkelstein & Halebian 2002, Gammelgaard 2004, Karim & Mitchell 2000).

Acquisitions provide access to knowledge through several mechanisms. First, acquisitions enable firms to obtain a pre-existing knowledge base of proven value (Empson 2001). Second, acquisitions enable firms to access knowledge that is not
available on the market (Teece et al. 1997). Third, tacit knowledge\(^7\) can be obtained through acquisitions (Karim & Mitchell 2000). Fourth, acquisitions can decrease transaction costs related to protecting knowledge compared to market transactions or licensing agreements (Teece et al. 1997). Fifth, acquisitions enable the firm to expand its product lines without the risk involved in internal innovation (Hitt, Hoskisson, & Ireland 1990). Finally, organizational learning occurs as firms move outside their strategic, organizational, and cultural contexts (Björkman et al. 2005, Gupta & Roos 2001, Vaara 1999).

Empson (2000) argues that while existing value may be captured at the time of closure, new value will be created only through knowledge transfer during post-acquisition integration. Following Davenport and Prusak (1998), knowledge transfer is defined here as the transmission of knowledge – sending or presenting knowledge to a potential recipient – and absorption of knowledge by the recipient. Knowledge transfer has been linked to a better post-acquisition performance in several previous acquisition studies (Brush 1996, Haspeslagh & Jemison 1991, Hébert, Very, & Beamish 2005).\(^8\)

Even though efficiency theory, together with knowledge and resource-based views, presents several mechanisms for value creation, previous research has shown that acquisitions are not always value-creating (Ravenscraft 1991, Ravenscraft & Scherer 1987, Ravenscraft & Scherer 1989). This has lead researchers to suggest alternative motives for acquisitions, such as managerialism and hubris.

According to the managerialism hypothesis, managers engage in acquisition to maximize their utility at the expense of the firm’s shareholders (Seth, Song, and Pettit 2000). Vaara, Tienari, and Laurila (2006) and Kitchener (2002) demonstrate how acquisitions can be used to legitimate the power position and leadership of the managers. Managerialism can be understood through agency theory. Agency theory posits that managers and shareholders engage in an agency relationship. Shareholders can be seen the principals and managers as their agents. In a principal-agent relationship, there is a risk that an agency problem\(^9\) arises for two main reasons. First, there is potential goal incongruence between managers and the shareholders. Marris (1964) suggests that managers are more likely to seek higher rates of growth in assets than in profits because managerial compensation is frequently related to the amount of assets under their control. This encourages managers to engage in acquisitions and empire building. Second, the agent may have information that is not available to the principal (Jensen & Meckling 1976, Eisenhardt 1989). Managers are gatekeepers for much of the information circulated, which creates a power position for the managers (Hellgren, Löwstedt, Puttonen, Tienari, Vaara, & Werr 2002). This gives managers the opportunity to exaggerate the level of potential synergies.

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\(^7\) Tacit knowledge is the expertise and skills that are based on the accumulated experience of people (Chaudhuri 2005).

\(^8\) However, there are several barriers for knowledge transfer in acquisitions. Greenberg, Lane, and Bahde (2005) mention language, physical space, organizational structure, and lack of motivation as possible barriers. Similarly, Haspeslagh and Jemison (1991) identify determinism, value destruction, and leadership vacuum as process-based problems that hinder knowledge transfer.

\(^9\) Agency problem refers to the agent breaking his/her fiduciary duty.
According to the *hubris hypothesis*, acquiring firm managers evaluate the acquired firm incorrectly while thinking that their valuations are correct (Roll 1986). In other words, the acquisition premium reflects a random error in the valuations. Seth et al. (2000) describe two versions of the hubris hypothesis. The first version assumes that managers behave irrationally. Jemison and Sitkin (1986) argue that the acquisition process itself involves factors that increase the tendency toward irrational behavior. The second version of the hubris hypothesis acknowledges the existence of synergies. Managers’ valuations of the level of synergies can be erroneous (Seth et al. 2000). One reason is that it is easier to quantify cost-reducing synergies than revenue-enhancing synergies. Gaughan (2002) argues that potential revenue enhancements are lauded as acquisition benefits but are not clearly quantified. Another reason is related to the uncertainty associated with acquired firm’s human capital. Coff (2002) showed that acquired firm’s human capital increased the risk of hubris. However, Laamanen (2007) argued that acquisition premia may be justified when target firms’ resources are difficult for the market to value. He found that, although premia were paid for R&D related assets, it did not cause negative abnormal returns.

In this thesis, I rely on efficiency theory and resource and knowledge-based views, as these are the two most often suggested acquisition motives in the literature.\(^\text{10}\)

2.3. Acquisition Outcomes

Acquisition outcomes have been assessed by two main methods. First, finance-oriented studies have looked at acquisition success from the investors’ perspective and examined either stock market or accounting outcomes to evaluate whether acquisitions create or destroy value. These studies have been purely quantitative, reflecting quantitative research traditions in finance and accounting. Second, socio-culturally-oriented studies have analyzed acquisition success from the personnel’s and managers’ perspectives. These studies have explained outcomes related to socio-cultural processes in acquisitions, including human resource outcomes and different behavioral and organizational outcomes. Both quantitative and qualitative approaches have been used. In the following, I will review each group of outcome measures.

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\(^{10}\) More detailed analyses of acquisition motives can be found in previous literature. For example, the study of Ravenscraft (1987) identifies 15 possible acquisitions motives ranging from tax savings and monopoly power to empire building and hubris. The study of Walter and Barney (1990) distinguishes 20 managerial goals in acquisitions. However, most of the acquisition motives in these two studies fall under the four categories discussed above. For additional acquisition motives – such as monopoly theory, raider theory, and disturbance theory – see Trautwein (1990). For nonfinancial acquisition motives, see King et al. (2004) who suggest that nonfinancial motives may be under-represented in acquisitions theory and research. By nonfinancial motives, they refer to motives such as the use of acquisitions to manage environmental or technological uncertainties, or the pursuit of growth to decrease organizational vulnerabilities.
2.3.1. Finance-Oriented Studies: The Investor’s Perspective

2.3.1.1. Stock market Outcomes

Stock market outcomes of an acquisition are determined by using event study methodology based on calculating the *cumulative abnormal stock market returns*\(^{11}\) resulting from an acquisition. Most studies suggest that cumulative abnormal returns are positive for the acquired firm (Cakici, Hessel, & Tandon, 1991, Lessard & Robin 1991, Harris & Ravenscraft 1991). Concerning the cumulative abnormal returns of the acquiring firm, the results are more mixed. Agrawal and Jaffe (2000), Agrawal, Jaffe and Mandelker (1992), Danbolt (1995), Hayward and Hambrick (1997), King et al. (2004) and Mathur, Rangan, Chhachhi, & Sundaram (1994) found that acquiring firms experienced significant and negative abnormal returns. However, Doukas and Travlos (1988) and Cakici, Hessel, and Tandon (1996) found that acquiring firms experienced insignificant abnormal returns, while Corhay and Rad (2000) and Yook and McCabe (1996) report positive abnormal returns.

The advantage of using stock market outcomes as performance measures is that they provide an easily available and objective source of information for public companies. If the firm’s goal is to maximize shareholder value, it makes sense to judge acquisitions based on how they directly contribute to the firm’s share price. However, event study methodology is better at explaining short-term rather than long-term effects. The short-term nature of most event studies may not capture the long-term effects of an acquisition that are determined by the post-acquisition integration process (Datta 1991, Hitt, Harrison, Ireland, & Best 1998).

2.3.1.2. Accounting Outcomes

Accounting outcomes are measured by following the evolution of different financial indicators, such as return on assets (ROA) and return on equity (ROE). Several studies suggest a negative performance effect in acquisitions when accounting outcomes are used. For example, the study by Fowler and Schmidt (1989) shows that abnormal return on common equity for the acquiring firm decreased during the four-year period following the acquisition. King et al. (2004) found that ROA one year after the acquisition was significantly negative. The results of Dickerson, Gibson, & Tsakalotos (1997), based on listed UK companies, indicated that acquisition had a negative effect on acquiring company performance as measured by ROA. Dickerson et al. (1997) also found that growth through acquisitions yielded a lower rate of return than growth through internal investment.

The advantage of using accounting outcomes as performance measures is that they are easily available for public companies. They provide a relatively objective picture of the evolution of the key financial indicators of the firm. Compared to stock market measures, accounting outcomes can be more reliable as they are not impacted by stock market speculation. Accounting outcomes can also be used to reflect a more long-term

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\(^{11}\) The cumulative abnormal stock market return is defined as the sum of the difference between the expected return on a stock and the actual return.
perspective on performance than stock-market outcomes. A disadvantage is that comparable measures for performance before and after the acquisition may not be available. In many cases, the acquired firm ceases to exist as an independent accounting unit, or reorganization makes the pre- and post-acquisition results for the acquired firm, difficult to compare. Therefore, one can only consistently follow the evolving of financial indicators on the side of the acquiring firm, which may not provide a complete picture of the total acquisition performance. Moreover, accounting measures are typically available in aggregate form for the entire firm. Isolating the performance of the acquisition after controlling for the performance of other units and the impact of other events is difficult, if not impossible. In addition, problems with accounting measures in general include accounting manipulation, undervaluation of assets, distortions due to depreciation, inventory valuation, differences in methods of consolidating accounts, and lack of standardization in international accounting conventions (Chakravarthy 1986). Thus, accounting data across firms, time, and countries may not be directly comparable.

2.3.2. Socio-Cultural Studies: Personnel’s Perspective

2.3.2.1. Human Resource Outcomes

Socio-cultural studies often look at acquisitions from the personnel’s perspective by using human resource outcomes. They focus on understanding the psychological and behavioral effects of acquisitions on employees (Hogan & Overmyer-Day 1994). The unit of analysis is either the management or, more generally, the personnel of the firm. The methodological approaches range from quantitative surveys to qualitative case studies and ethnographic research. From personnel’s perspective, acquisitions are seen as stressful, disruptive, and difficult experiences for the people involved, especially on the acquired firm side. This explains why human resource-oriented studies often focus on examining the acquired firm.

One widely used human resource outcome is top management turnover following the acquisition. Several studies have linked acquisitions to exceptionally high top management turnover in the acquired firm (Davis & Nair 2003, Krug & Hegarty 2001, Krug & Hegarty 1997, Krug & Nigh 1998). Top management turnover has been further linked to negative perceptions of stock market and accounting outcomes (Cannella & Hambrick 1993). From the resource based view, the loss of experience related to top management turnover may not be easily recovered (Bergh 2001). The acquiring company is losing part of what it acquired when managers with valuable skills and knowledge leave the company (Risberg 2003). Furthermore, the symbolic effects of the loss of established leaders can be unsettling to organization members and external stakeholders (Cannella & Hambrick 1993). Although top management turnover mostly reflects the effects upon managerial level of the firm, management turnover may have serious effects on lower hierarchical levels. Risberg (2003) argues that subordinates’ reactions are affected by their supervisors’ actions. However, in some cases, top management turnover can be desired by the acquirer. For example, when buying a poorly managed company, one of the goals of the acquisition may be managerial skill transfer from the acquiring to the acquired firm, which includes replacing the acquired firm managers with managers from the acquiring firm. Furthermore, top management
turnover may facilitate the integration of the firms because the new management is likely to show more cooperation and less change resistance\textsuperscript{12}.

An advantage of examining top management turnover is that objective information can be collected on the number of managers that left the acquired firm, which provides a picture of what happened to the acquired company managers after the acquisition and clarifies some of the human resource implications of the acquisition. A disadvantage is that sometimes it is difficult to determine whether a manager’s decision to leave was connected to the acquisition and whether top management turnover had a positive or negative effect on the subsequent acquisition performance.

In addition to top management turnover, several other human resource outcomes have been identified in previous research, mostly by qualitative case studies\textsuperscript{13}. These include anxiety and stress (Astrachan 1995, Buono & Bowditch 1989, Ivancevich, Schweiger, & Power 1987, Nahavandi & Malekzadeh 1988, Panchal & Cartwright 2001, Schweiger & DeNisi 1991), conflict (Kühlmann & Dowling 2005, Marks & Mirvis 1985, Olie 2005), ambiguity (Ivancevich et al. 1987, Schweiger, Ivancevich, & Power 1987), loss of trust (Chua, Engeli, & Stahl 2005), power struggles (Buono & Bowditch 1989), sense of loss (Sinetar 1981), dissatisfaction and disloyalty (Newman & Krzystofiak 1993), disorientation and feelings of worthlessness (Schweiger et al. 1987), and change resistance and non-cooperation (Olie, 2005). Although most frequently reported human outcomes tend to be negative, Sinetar (1981) also identifies possible positive outcomes, such as greater job satisfaction, better prospect for promotion, compensation, and increased status.

In conclusion, the reported human resource outcomes of acquisitions usually concentrate on negative outcomes. Personnel’s perspective explicitly or implicitly suggests that lower than expected stock market and accounting outcomes are due to negative personnel outcomes that negatively affect the daily operation and economic value of the firm. Personnel’s perspective also suggests that “synergy” for management may equal to “loss of jobs” for employees (Vaara 2002). Davy, Kinicki, Kilroy, & Scheck (1988) estimate that human resource problems are responsible for between a third and half of all merger failures.

The problem with human resource outcomes is that they are more difficult to capture quantitatively from secondary sources than stock market and accounting outcomes. Therefore, a large part of research using human resource outcomes is based on case studies.

\textsuperscript{12} For instance, in the merger of Bayerische Vereinsbank and Bayerische Hypotheken- und Wechselbank, the war of words between Mr. Schmidt, the former CEO of Bayerische Vereinsbank, and Mr. Martini, the former CEO of Bayerische Hypotheken- und Wechselbank, caused great damage to the new merged bank’s reputation and share price. Investors became afraid of a power struggle between the two firms. Two-and-a-half years after the merger announcement, Mr. Martini and the four remaining managing-board members from Bayerische Hypotheken- und Wechselbank resigned. Mr. Schmidt was now able to more effectively follow his integration agenda and the two firms began to work more closely together. (The Economist, Aug 3 2000)

\textsuperscript{13} For a literature review on the human side of acquisition, see Seo and Hill (2005).
2.3.2.2. Behavioral and Organizational Outcomes

In addition to human resource outcomes, socio-cultural studies use other behavioral and organizational outcomes. Data on these outcomes is usually not available from secondary sources, and thus managerial perceptions or case studies are used. Case studies usually broadly explore several aspects of performance, whereas surveys tend to utilize one or several Likert-type scales of different organizational outcomes. The behavioral and organizational outcomes used in quantitative studies include acculturation (Larsson 1993), perceived financial performance (Calori, Lubatkin, Very 1994, Datta 1991, Schoenberg 2004, Very et al. 1996, Very et al. 1997), level of integration (Weber et al. 1996), resource sharing problems (Brock 2005), integration-related problems (Brock 2005), realization of technology transfers (Birkinshaw, Bresman, & Håkanson 2000) and change in R&D output (Birkinshaw et al. 2000).

Some of the quantitative studies do not comment on the overall outcome of the acquisition and/or do not provide descriptive statistics that would allow for evaluating the mean of the outcome variable(s) used. The studies with more detailed descriptive statistics provide some indication of the overall level of perceptual acquisition outcomes. For example, Datta (1991) found managerial evaluations of acquisition performance to be above average in both high and low integration acquisitions, ranging from 2.925 to 3.093 on a five point Likert-scale. Brock (2005) reported the average level of resource sharing to range from 2.314 to 2.841, depending on the national cultural characteristics of the acquiring and acquired firms’ home countries. On a scale from 1 = easy to 5 = very difficult, this corresponds to below average performance in acquisitions with large national cultural differences and above average performance in acquisitions with small national cultural differences. Very et al. (1996, 1997) measured perceived financial performance using the post merger performance index. The mean corresponded to 3.43 (in Very et al. 1996) and to 3.44 (in Very et al. 1997), which is above average on a five point Likert scale from (1) = performance greatly deteriorated to (5) = performance greatly improved. Birkinshaw et al. (2000) reported that the respondents in their multiple case study assessed the acquisitions as above average, between neutral and successful (ratings of 4.0 to 5.0 out of 7), in regard to change in R&D output and realization of technology transfer. However, Schoenberg (2004) found acquisition performance to be below the midpoint of a five point Likert scale, 2.98.

These results suggest that perceived acquisition outcomes tend to be more positive than stock market, accounting, and human resource outcomes. There are several possible explanations. First, managerial perceptions may reflect the possible non-financial motives suggested by King et al. (2004), such as managing environmental or technological uncertainties. Realization of non-financial motives may not directly show in the short-term stock market or accounting performance, but may be strategically vital for the long-term performance of the firm. Second, managerial perceptions may capture the impact of the acquisition better than stock and accounting market measures. Stock market and accounting outcomes are usually affected by several factors other than the acquisition. Hence, isolating the effect of the acquisition can be difficult. Third, managerial perceptions may include a non-response bias since managers of successful acquisitions may be more likely to take part in the survey. Theoretically, this may lead to a success bias. Fourth, managers may overestimate the perceptual acquisition outcomes due to the fear of admitting any failure in the acquisition.
The main advantage of using subjective managerial perceptions is that one can research a wider range of outcomes that is possible with stock market or accounting-based measures. These outcomes, such as the level of resource sharing problems or integration related problems, can help to better understand stock market and accounting-based outcomes. Thus, by using managerial perceptions it is possible to gain a more multifaceted view of acquisition outcomes. In addition, perceptional data is available even when secondary data is not. First, managerial perceptions can be collected for private companies even if stock market and accounting outcomes are not available for the researcher. Second, it is possible to gain perceptional performance information separately for both the acquired company side and acquiring company side while comparable financial data may be aggregated and no longer available for both previously separate firms.

For behavioral research, an additional advantage is that managerial decisions are based on the views of top managers and their subjective perception of the situation even if they differed from the objective state of affairs. Thus, if one wishes to examine managerial behavior and decision making, it may well be warranted to look at their perceptions of acquisition process and acquisition outcomes because their actions are based on their perceptions – biased or unbiased – of the situation. Top managers influence organizational form, conduct, and performance based on their perceptions of the strategic context and their own theories of action (Hambrick 1989).

The disadvantage of perceptional outcome measures is that they may contain a bias (Dess & Robinson 1984). The biases may include success bias and/or sampling bias, as mentioned above. Assessing the exact type and magnitude of the bias is often difficult. This makes it hard to directly compare the results of studies using perceptional measures with studies that use stock market and accounting outcomes.

In this study, I have chosen to use quantitative perceptional measures of behavioral and organizational outcomes for the following reasons. First, the use of perceptional outcome measures is recommended when appropriate objective measures are not available (Datta 1991, Dess & Robinson 1984). A large number of Finnish acquisitions are carried out by private companies, which makes stock market and accounting data unavailable for these companies. Second, due to aggregation, secondary performance data related to only the acquisition is rarely available. Third, perceptional data allows a more comprehensive measurement of intermediary acquisition outcomes, such as synergy realization and knowledge transfer, than would have been possible with secondary data (Venkatraman & Ramanujam 1986). Fourth, previous studies support the reliability of self-reported performance in organization studies (Dess & Robinson 1984, Venkatraman & Ramanujam 1986). Fifth, recent accounting scandals have undermined the reliability of accounting-based outcome measures. Finally, private equity buy-outs are a growing trend. Global private-equity buy-outs reached USD 757.6 billion, corresponding to 20% of global M&A volume according to Thomson Financial. Private-equity buy-outs involve taking private a company which is trading on a public stock market. Stock-market and accounting outcomes are not available for private-equity buy-outs.

15 In 2002, 250 American public companies had to restate their previous accounts due to faulty accounting practices. Accounting scandals have also involved European firms. For example, MyTravel, a big British...
perceptional outcome measures have been widely used in previous acquisition research (Brock 2005, Datta 1991, Morosini, Shane & Singh 1994, Morosini, Shane, & Singh 1998, Schoenberg 2004, Slangen 2006, Van Oudenhoven & Van der Zee 2002, Very et al. 1996, Very et al. 1997). This thesis follows the methodological setting put forward in these earlier acquisition studies. In the methods section, I discuss the steps that were taken to reduce the possible biases related to the use of perceptional measures.

2.4. The Process View of Acquisitions

Haspeslagh and Jemison (1991) present a model of the acquisition process (see Figure 1). The acquisition process starts with the acquisitions idea. In the next step, the acquisition has to be justified. Strategic and financial analyses are an important part of this step and aim to show how the acquisition is to create economic value for the acquiring firm (Haspeslagh & Jemison 1991). Initial strategic and financial factors determine the upper limit for the degree of success that the acquisition can achieve (Chua et al. 2005). After the acquisition deal is closed, post-acquisition integration follows. During post-acquisition integration, changes are made in the functional activities, organizational structures and systems, and cultures of the two organizations to facilitate their consolidation into a functioning whole (Pablo 1994).

Figure 1 The role of post-acquisition integration in the acquisitions process

Source: Adapted from Haspeslagh and Jemison 1991, page 12.

Haspeslagh and Jemison (1991) suggest that unless the acquisition is motivated by purely financial reasons – to lower the cost of capital – post-acquisition integration plays an important role in determining acquisition results. The management of the post-acquisition integration process determines the extent to which acquisition potential is realized (Chua et al. 2005) Empirical evidence supports the importance of post-acquisition integration. Larsson and Finkelstein (1999) showed that post-acquisition integration can be a very strong predictor for acquisition results, while Morosini et al. (1994) found that difficulties in post-acquisition integration can be detrimental to acquisition success. In addition, Bruton, Oviatt, and White (1994) found that tacit knowledge about the acquisition process as well as how to integrate and manage the assets of the acquired firms was vital to successfully turning around financially distressed acquired firms.

holiday tour operator, and Vivendi, a French conglomerate, had to restate previous profits. (The Economist, Nov 28, 2002)
When trying to understand post-acquisition integration, researchers have looked at the phenomenon from different theoretical angles. In the following discussion, I identify five views on post-acquisition integration: strategic management, human resources, cultural, political, and discursive perspectives. The first four views are based on the frameworks of Mirvis and Marks (1992) and Vaara (2002). I complement their frameworks by adding a fifth perspective, the discursive perspective, which reflects a newer, critical research tradition within studies on post-acquisition integration.

2.4.1. The Strategic Management Perspective

The strategic management perspective has traditionally been the leading perspective in post-acquisition integration studies. It is based on strategic planning literature and perceives decision-makers as rational actors. Accordingly, managers are considered as information processors who identify opportunities and threats, formulate strategies to address them, and plan activities and organize people to implement strategies to achieve desired results (Mirvis & Marks 1992).


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16 Mirvis and Marks (1992) discern strategic management, psychological, cultural, and political perspectives while Vaara (2002) distinguishes strategically-oriented, human resource, and culturally-oriented studies. These classifications are very similar. Vaara (2002) prefers the term “human resources” perspective to what Mirvis and Marks call “psychological perspective”. Other authors have presented similar classifications, too. For example, Larsson and Finkelstein (1999) separate strategic management, finance, organizational research, and human resources management as different theoretical lenses that have been used.

17 It should be noted that the categories are not mutually exclusive. For this reason, in the following discussion, some studies will be cited under more than one theoretical perspective because they draw on and contribute to several perspectives.

18 It is also possible to see the discursive perspective as an extension of cultural and political perspectives. For example, the discursive perspective discusses the cognitive challenges and stereotyping related to perceived national cultural differences. In addition, the discursive perspective explores how sensemaking processes involve politics for the promotion of organizational or personal interests (Söderberg & Vaara 2003c). However, I have chosen to discuss the discursive perspective as a separate perspective because of its distinctive focus on sensemaking processes. The basic idea of sensemaking is that reality emerges from efforts to create order and retrospectively make sense of what occurs (Weick 1993) when individuals compare cues extracted from the present with their mental models based on past experiences (Weick 1995).
With few exceptions (Datta & Grant 1990), studies concentrating on conglomerates, relatedness and strategic fit have tended to be quantitative and have used stock market outcome measures (Chatterjee 1986, Lubatkin 1987). Due to the difficulties in capturing other strategic aspects with only stock market data, research on synergy, knowledge transfer, and organizational learning in acquisitions has also used accounting measures (Brush 1996, Harrison et al. 1991, Porrini 2004, Seth 1990), quantitative perceptional measures (Saxton & Dollinger 2004), and case study methodologies (Buono 2003, Björkman et al. 2005, Hasegawa 2000, Vaara et al. 2003a).

2.4.2. The Human Resources Perspective

The human resources perspective drops the assumption of rationality in managing the post-acquisition integration process. According to this perspective, integration strategies and plans are constantly revised based on the emotional states of both the managers and personnel (Mirvis & Marks 1992). Duhaime and Schwenk (1985), Jemison and Sitkin (1986), as well as Haspeslagh and Jemison (1991) propose the existence of irrational tendencies of decision makers that act as impediments to the integration process. These include determinism (the tendency of managers to remain attached to the original acquisition justification instead of trying to adapt to changes), value destruction (caused by changes during the integration process that foster uncertainty, fear and self-preservation on the part of the employees), and leadership vacuum (lack of clear leadership and communication) (Haspeslagh & Jemison 1991).

The human resources perspective aims to explain organizational members’ psychological and behavioral responses to acquisitions (Seo & Hill 2005). Mirvis and Marks (1992) argue that reckless and self-defeating moves and countermoves that are inexplicable from strategic management and political perspectives can be understood through the human resources perspective. Acquisitions have several characteristics that trigger negative reactions by organizational members. First, an acquisition represents an event where organizational members lack a sense of control (DeNisi & Shin 2005). Second, organizational members feel uncertain about the future and fear losing their jobs (DeNisi & Shin 2005, van Dick, Ullrich, & Tissington 2006). Third, acquisitions are perceived as a threat to existing group values, structures, and social identity (Bartels, Douwes, de Jong, & Pruyn 2006, DeNisi & Shin 2005, van Dick et al. 2006).

The human resources perspective links negative human resource outcomes to most acquisitions that fail to create economic value (Napier 1989). For example, top management turnover has been linked to negative perceptions of stock market and accounting outcomes (Cannella & Hambrick 1993). Further, DeNisi and Shin (2005) propose that if an organization is faced with employees’ resistance to change, low levels
of commitment, and higher rates of employee turnover, the organization will be unlikely to achieve the goals of the acquisition. Thus, according to the human resources perspective, it is the people and their psychological and behavioral reactions to acquisitions which are critical to the success or failure of acquisitions (Cartwright and Cooper 1992, Marks and Mirvis 2001, van Dick et al. 2006).


2.4.3. The Cultural Perspective

Researchers began to analyze mergers and acquisitions from a cultural perspective in the mid-1980s. This was related to a simultaneous increasing interest in culture in general management literature after Peters and Waterman (1982) linked culture to firms’ performances, and Barney (1986) suggested that culture was a source of competitive advantage. Although cultural discourse on acquisitions draws strongly from strategic management and particularly from the human resources perspective, it has gradually emerged as a new stream of acquisition research.

Cultural variables and their impact on post-acquisition integration are the particular focus of cultural perspective. The notion of culture has focused attention on people’s interaction in acquisitions as well as on the role of history, traditions and values in organizations (Riad 2005). The current literature in the cultural perspective includes a wide variety of literature reviews, theoretical models, books, case studies, quantitative analyses, and discursive analyses, all of which I will briefly review in the following.

In one of the earliest literature reviews on culture in acquisitions, Cartwright and Cooper (1990) pointed to the general importance of cultural dynamics in acquisitions. In a later review, Schoenberg (2000) indicated two focus areas in previous acquisition studies on culture: cultural differences and acculturation. Risberg’s (2003) review on post-acquisition integration was more general by nature, but she identified culture as an important theme in previous acquisition studies and pointed out the importance of a wide variety of theoretical lenses when studying acquisitions. Shimizu et al. (2004) presented the first literature review that concentrated purely on quantitative studies of foreign acquisitions. Amongst their major findings, they reported that national cultural differences tended to create additional challenges for post-acquisition integration, which emphasized the importance of culture in foreign acquisitions. In two recent literature reviews on culture in acquisitions, both Stahl and Voigt (2005) and Teerikangas and Very (2006) discovered contradictory findings related to the impact of cultural differences. Both reviews highlighted the importance of better understanding the impact mechanisms of culture in post-acquisition integration.

Concerning theoretical models, Shrivastava (1986) presented the first multi-level model of post-acquisition integration which explicitly included cultural integration. Nahavandi and Malekzadeh (1988) were the first to present a theoretically-grounded model on
adaptation and acculturation in acquisitions. After that, practice and/or consulting-oriented studies have presented several models of how to manage cultural differences and cultural integration. For example, Cartwright and Cooper (1993, 1995) argued that cultural compatibility is important in determining acquisition outcomes. In their theoretical force-field model, Elsass and Veiga (1994) identified cultural differentiation and organizational integration as major opposing forces in acquisitions. They argued that management should minimize the forces of cultural differentiation and maximize the forces of organizational integration (Elsass & Veiga 1994). Finally, Olie (1990) pioneered research in foreign acquisitions by developing a dynamic model of merger stability for successfully implementing foreign acquisitions. A common factor in these “early” theoretical models is the predominant role of pre-acquisition factors, such as cultural differences, in determining post-acquisition outcomes.

Later theoretical models have focused more on how to manage the actual process of cultural integration. Bijlsma-Frankema (2001) presented a detailed model for this. Marks and Mirvis (2001), in turn, focused on how to realize potential synergies during the post-acquisition stage. Additionally, Schraeder and Self (2003) identified cultural challenges in post-acquisition integration and suggested a model for managing post-acquisition integration through training, support, and socialization. Buono (2003) presented a theoretical model regarding integrating both cultural and economic factors in acquisitions. Moreover, Schreyögg (2005) discussed how to determine the degree of cultural fit that is needed in post-acquisition integration. One should also mention the study of Cartwright and McCarthy (2005) in which the authors identified factors that contribute to cultural fit and discussed integration problem areas.

Reflecting the growing interest in the cultural perspective on acquisitions, several books have been published as well. In their book on post-acquisition integration, Buono and Bowditch (1989) suggested that cultural differences are likely to reinforce inter-organizational conflicts during post-acquisition integration. They also argued that cultural and psychological integration usually takes longer than procedural and physical integration (Buono & Bowdith 1989). Nahavandi and Malekzadeh (1993) expanded their article on acculturation (Nahavandi & Malekzadeh 1988) into a book in which they elaborate their acculturation model. Cartwright and Cooper (1996) concentrated on discussing issues of cultural compatibility. In addition, Morosini (1998) examined the role of national cultural differences in a book that complemented his journal articles (Morosini et al. 1994, Morosini et al. 1998). He suggested strategies for turning national cultural differences into lasting practical advantages (Morosini 1998). More recently, the book edited by Stahl and Mendenhall (2005) and Søderberg and Vaara (2003a) focused specifically on human resources and cultural aspects of post-acquisition integration.

Explorative case studies have been abundant and have reflected the themes discussed in theoretical papers. The case studies of Sales and Mirvis (1984) and Buono et al. (1985) were amongst the first studies that empirically explored the role of culture in acquisitions. Sales and Mirvis (1984) identified cultural domination as a factor that increased change resistance in acquisitions, while Buono et al. (1985) conceptualized acquisition as an attempt to combine different organizational cultures. In the context of foreign acquisitions, Napier et al. (1993) and Olie (1994) were the first to examine foreign acquisitions in case studies. Napier et al. (1993) examined how to manage
diversity in foreign acquisitions and underlined the importance of understanding the implications of organizational and cultural diversity while Olie (1994) explored in detail the difficulties stemming from national cultural differences in Dutch-German acquisitions. Olie (1994) found that, most often, national cultural differences increased integration problems. He presented the same conclusion in a later case study of foreign acquisitions (Olie 2005).

More recent case studies on culture often have a broader focus. For example, Zaheer et al. (2003) explored the role of both culture and identity in acquisitions. Risberg (2001) introduced an ambiguity approach to understand how employees interpret the post-acquisition integration process. Risberg (2001) suggested that the ambiguity approach can help to avoid illusions of familiarity related to nearby cultures and industries. In their case studies, Hasegawa (2000) and Blaško, Netter, & Sinkey (2000) linked culture to knowledge transfer and value creation. Case studies on foreign acquisitions have also become more common. For instance, Nummela (2005) described the integration of foreign acquisitions from a cultural perspective and demonstrated the versatility of integration, Säntti (2001) explored the role of both national and organizational cultures, and Fang, Fridh, and Schultzberg (2004) examined failure in culturally close acquisitions.

Some studies have combined both quantitative and qualitative approaches. Bresman et al. (1999) explored knowledge transfer in international acquisitions through both survey and interviews. They identified national cultural distance as a factor that contributed to misunderstandings between individuals (Bresman et al. 1999). In addition, by examining three acquisitions in detail, Birkinshaw et al. (2000) discovered the importance of human integration as a mechanism to achieve cultural convergence and mutual respect.


Acquisition outcomes used in quantitative studies within the cultural perspective have ranged from stock market (Datta 1991) and accounting outcomes (Morosini et al. 1994, Morosini et al. 1998) to human resource outcomes (Brock 2005), and various perceptual measures of different organizational outcomes, including acculturation (Larsson 1993), perceived financial performance (Calori et al. 1994, Datta 1991, Morosini et al. 1994, Schoenberg 2004, Slagen 2006, Very et al. 1996, Very et al. 1997), level of integration (Weber et al. 1996), resource sharing problems (Brock 2005),
integration related problems (Brock 2005), realization of technology transfers (Birkinshaw et al. 2000) and change in R&D output (Birkinshaw et al. 2000).

Recently, studies taking a discursive approach have also contributed to the cultural perspective. Through discourse analysis, these studies aim to uncover deeper levels of culture by exploring cognitive challenges and stereotyping related to culture.19

2.4.4. The Political Perspective

The political perspective suggests that integration is not a rational process, but a highly political process with many conflicting personal and political interests. Acquisitions change the established order of activities in both firms, which creates uncertainty, fear, and a tendency toward self-preservation amongst organizational members (Haseslagh & Jemison 1991). Such an environment is fertile ground for interest conflicts concerning the political interests of managers, business units, functions, and political coalitions (Mirvis & Marks 1992). Interest conflicts can concern, for instance, cultural beliefs, future positions, investments and employment (Vaara 1999).

Vaara (1999) stresses the importance of distinguishing political interest conflicts from cultural differences – and hence the political perspective from the cultural perspective. He argues that cultural differences can be used as political arguments. Vaara (1999) found that organizational members may insist that certain practices cannot work in a particular place because of cultural differences when, in reality, they want to avoid the planned decision for political reasons unrelated to cultural differences. Similarly, Riad (2005) found that organizational members draw on organizational culture to legitimate their resistance. She found that power effects related to organizational culture are convenient and seductive even for those who resist some of the elements of the current organizational culture (Riad 2005). The political perspective also acknowledges that managerial discourse can be used to shift the blame from managerial action to cultural differences. This is illustrated by the Daimler Chrysler case. Kühlmann and Dowling (2005) reported that cultural differences played a minor role in managerial discourse at the beginning of the integration process. However, as problems surfaced, managers increasingly attributed the problems to cultural differences (Kühlmann & Dowling 2005). Yet, it is likely that not only cultural differences but also managerial action was to blame.

Research on the political perspective with quantitative methods is difficult. Most political behavior happens behind closed doors and is never officially documented. Therefore, quantitative research on political perspective remains scarce (Pablo 1994), while the use of case study methodology (Vaara 1999, Kitchener 2002) and ethnographic research methods (Riad 2005) have been found useful.

2.4.5. The Discursive Perspective

The discursive perspective reflects the critical and postmodernist research traditions in organizational studies (Alversson & Deetz 1996). The discursive perspective arose to

19 The discursive perspective will be discussed in sub-chapter 2.4.5.
criticize and complement other perspectives on post-acquisition integration. Although this perspective still represents a relatively new stream of acquisition research, Søderberg and Vaara (2003c) point to the importance of the discursive perspective as an attempt to uncover the social and discursive construction of post-acquisition processes.

Within the discursive perspective, one group of studies has focused on narratives and sensemaking of post-acquisition integration. First, Gertsen and Søderberg (2000) showed the complexity of actors’ sensemaking processes during post-acquisition integration. Second, Vaara (2002) explored how success and failure are discursively constructed in narratives of post-acquisition integration. Third, Vaara, Risberg, Søderberg, and Tienari (2003b) focused on the role of cultural stereotypes20 in post-acquisition narratives. Fourth, based on narratives, Vaara and Tienari (2003) showed how the “balance of power” principle between the merging firms triggered national confrontation and constrained the managers’ ability to control the integration process. Fifth, Vaara et al. (2003a) identified different sensemaking processes related to knowledge transfer in acquisitions. Sixth, Kleppestø (2005) described how organizational members try to establish in-group identities and seek social recognition from the out-group. If social recognition is not granted, a social identity conflict arises. Seventh, Yu, Engleman, & Van de Ven (2005) identified a vicious cycle of repeated conflicts in how organizational members made sense of issues that emerged during post-acquisition integration. Finally, Riad (2005) illustrated how the use of cultural discourse focused attention on certain issues while others were marginalized and how rhetorical skills empowered particular actors but not others. In a later study, Riad (2007) uncovered the complex conflicts of interests during post-acquisition integration and described how cultural discourse was used to build allegiances.

Another approach has been to research post-acquisition integration through metaphors21. The studies of Hirsch (1986) and Hirsch and Andrews (1983) were the first to explore metaphors in hostile takeovers. More recently, Vaara et al. (2003c) proposed that cultural identification processes in acquisition situations can be seen as metaphorical processes. They argued that merging involves the construction of one’s own identity in relation to the other party and the construction of a common identity in the new organization (Vaara et al. 2003c).

A third group of studies has concentrated on analyzing media texts. The media as a whole is a sense-maker because it takes part in developing a meaningful framework for understanding complex phenomena, such as acquisitions (Hellgren et al. 2002). The media is also a sense-giver because it attempts to influence sense-making and meaning construction among its audiences toward specific definitions of “reality” while marginalizing and excluding other versions of “reality” (Hellgren et al. 2002). In the acquisition context, Risberg, Tienari, and Vaara (2003) explored how media texts (re)construct power relations during post-acquisition integration. They found a discursive (re)construction of asymmetric power relations and national identities which are embedded in the history of colonization and domination between the nations.

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20 Stereotypes are cultural categorizations of social groups that help to create meaning in a complex social universe (Vaara et al. 2003b).

21 In general, a metaphor is a figure of speech that implies comparison between two unlike entities (Encyclopedia Britannica, http://www.britannica.com/eb/article-9052289/metaphor).
Further, Vaara et al. (2006) examined the discursive legitimization strategies used when making sense of post-acquisition integration in the media and distinguished different legitimization strategies. In addition, Tienari, Vaara, & Björkman (2003) identified how key actors draw on and mobilize rationalistic and nationalistic discourses in public discussions, while Hellgren et al. (2002) illustrated how issues are (re)constructed in media texts through interpretations of “winning” and “losing”.

Finally, researchers have examined the role of corporate language in acquisitions. Vaara, Tienari, Piekkari, & Sääntti (2005) argued that corporate language policies have power implications and that language skills can lead to construction of superiority and inferiority and, ultimately, reproduce post-colonial identities. In addition, Piekkari et al. (2005) found that corporate language policies can have disintegrating effects on several human resource issues.
3 THE ROLE OF CULTURE IN ACQUISITIONS

This study builds mostly on the cultural perspective on post-acquisition integration. In this chapter, I discuss culture and its role in post-acquisition integration in detail. I start by presenting different perspectives on culture and positioning the thesis within culture research. I continue by discussing different levels of culture and concentrate on national and organizational cultural levels because these have been considered to be particularly important in acquisitions. I explore how national and organizational cultures, especially national and organizational cultural differences, have been researched in the post-acquisition integration context. Then, I present acculturation theory and its applications in the acquisition context, which is followed by a discussion on cultural integration. I conclude with a framework for the thesis.

3.1. What is Culture?

Several theoretical approaches have been used to study culture. Schein (1990) suggests that one reason for the diversity is that culture lies at the intersection of several social sciences – anthropology, sociology, social psychology, and organizational behavior. Each of the social sciences tends to have a slightly different view of culture. In the following, I will discuss the main views of culture prevalent in the field of organizational behavior.

3.1.1. Realist and Constructionist Views of Culture

Two main views of culture can be identified in the organizational behavior literature: the realist and the constructionist view. The realist view sees culture as a relatively stable, homogenous, and consistent system of assumptions, values, and norms (Morris, Leung, Ames, & Lickel 1999). Cultures are understood as identifiable and well-defined entities that can be quantified and compared with each other (Hofstede 1991). The realist view is often used in comparative studies to describe differences across cultures in terms of general, external standards based on comparative surveys. The realist view is also called the outside or etic perspective on culture (Morris et al. 1999, Pike 1967).

The constructionist view of culture is based on postmodernism. In postmodernism, the centrality of discourse is emphasized and natural objects are viewed as discursively produced. Meaning is always incomplete and indeterminate because any thing in the world may be constructed as many different objects, limited only by human creativity. According to the constructionist view of culture, culture is seen as a text, and members of the culture are readers who enter into the text and reproduce the text as they consume it. Therefore, culture is not seen as genuine and authentic as in the realist view, but as negotiated and contingent. (Alversson & Deetz 1996, Martin & Frost, 1996)

In constructionist studies on culture, the focus is on the actors as they try to make sense of the situation in order to make their actions rational and legitimate (Klepepestø 2005). When making sense of their own and other cultures, actors draw boundaries between the different cultures (Vaara 1999). If culture is perceived as an ongoing narrative aiming at
the creation of meaning, it is not important how large organizational cultural differences are, but what is made of these differences (Kleppestø 2005). The constructionist view on culture is consistent with the insode or emic perspective of ethnographic studies that aim to describe a particular culture on its own terms (Morris et al. 1999, Pike 1967). The constructionist view is less easily quantifiable than the realist view, but open to ethnographic and qualitative approaches (Morris et al. 1999).

### 3.1.2. Integration, Differentiation, and Fragmentation Perspectives

Martin (1992) distinguishes three perspectives on culture research: integration, differentiation, and fragmentation (see also Martin & Frost 1996). In general, integration follows the realist view discussed above whereas differentiation and fragmentation go beyond the realist view and towards the constructionist view. The integration perspective defines culture as clear and consistent (Martin 1992). All cultural members are assumed to share the same values, which promotes a shared sense of loyalty and commitment to the organization (Balmer & Wilson 1998). In contrast, studies taking the differentiation perspective consider cultural manifestations to be predominantly inconsistent with each other (Martin 1992). Within one culture, differentiated subcultures may co-exist in harmony, conflict, or indifference to each other. The particular mix of sub-cultural differences is unique for each culture (Balmer & Wilson 1998). The fragmentation perspective abandons the assumptions of coherence and stability, even at sub-cultural levels (Martin & Frost, 1996). According to the fragmentation perspective, cultural ambiguity is inevitable (Balmer & Wilson 1998). Consensus fails to emerge on a country, organization wide or sub-cultural basis, except in transient, issue-specific ways (Balmer & Wilson 1998).

Meyerson (1991) maintains that organizational members may prefer one cultural perspective over the others, depending upon their position within the organization. For example, managers tend to have an integration perspective on culture. Organizational members at the lower levels of a hierarchy tend to take a differentiation perspective because a particular subculture is more relevant for them. Newcomers, employees whose jobs seem ambiguous, and individuals with a high tolerance for ambiguity tend to see their work from the fragmentation perspective. (Meyerson 1991) In addition, Meyerson (1991) suggests that the perspective on culture may be issue specific. Organizational members may identify with the organization on some issues, with certain subcultures on other issues, and be ambiguous on the reminder.

### 3.1.3. Different Views of Culture in Acquisition Research

As discussed above, in the field of culture, there are fundamental differences in the way that people view culture. The choice of culture concept influences the overall theoretical framework and research design (Søderberg & Björkman 2003). However, acquisition studies have traditionally included little reflection on what culture is. Most acquisition studies, particularly quantitative ones, have taken a realist and integrationist perspective on culture (Teerikangas & Very 2006).
Reliance on the realist and integrationist perspective is not unproblematic. Teerikangas and Very (2006) criticize this tendency on the grounds that a unitary view of organizational culture has omitted a more complex perspective on cultures in organizations. Vaara (1999) points out that the integration perspective does not account for differences in cultural change processes across different parts of the organizations and among different sub-groups. In addition, the integration perspective may not uncover inconsistencies and ambiguities in the belief systems.

Case studies have attempted to go beyond the realist perspective towards more constructionist views. First, the case study of Söderberg and Björkman (2003) showed the context specificity of culture. Culture appeared as symbolic practices that only come into existence in relation to and in contrast with other cultural communities. A similar finding was presented by Björkman, Tienari, and Vaara (2003), who argued that phenomena around socio-cultural integration are context specific, ambiguous, and difficult to control for management. Furthermore, Gertsen and Söderberg (1998) observed that culture is fluid and constantly recreated and negotiated by participants. Second, Vaara and Tienari (2003) uncovered deeper levels of culture by being critical towards what they call “official truth” and by paying attention to the voices that are marginalized. Third, Säntti (2001) showed that the organizational cultures of the acquiring and acquired firm consist of several sub-cultures. Fourth, Vaara (2002) and Kleppestø (2005) demonstrated how culture and performance are socially constructed in acquisitions. Finally, Riad (2007) concentrated on discovering the extent to which culture in acquisitions is cohesive or pluralistic. Riad (2007) argued that while some events in the merger process contribute to cultural pluralism and contest of interest, other events appear to render allegiance to cohesive cultural elements. Riad (2007) found that individuals occupy temporary positions in cultural coalitions for political purposes by negotiating transitory, but temporarily cohesive allegiances.

In addition to these case studies, the longitudinal quantitative study of Schweiger and Goulet (2005) is interesting because it shows the dangers of a realist view of culture. Schweiger and Goulet (2005) found that surface level cultural learning 22 based on a realist view of culture did not benefit integration but lead to dysfunctional outcomes:

“Failing to delve into the root values and assumptions of both organizations to understand why each, as a collective, functions the way it does may strengthen perceptions of cultural differences that reinforce stereotypes and contribute to conflict between the combining firms.”

(Page 1480)

Based on their results, Schweiger and Goulet (2005) argued that, for cultural learning to facilitate the post-acquisition integration process, a deep level of cultural learning 23 was necessary, which required taking a more constructionist view of culture.

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22 Surface level cultural learning is limited to learning about each firm’s history, general values and beliefs (Schweiger & Goulet 2005).

23 Deep level cultural learning reaches down into the more subjective, less formally communicated codes of conduct of the acquiring and the acquired firms (Schweiger & Goulet 2005).
3.1.4. Positioning of the Study within Culture Research

Studies within both the realist and constructionist view are needed if we are to obtain a better understanding of the role of culture in acquisitions. Although the constructionist approach has become more popular and can help us understand on a deeper level what happens in a particular acquisition case, when the assumption of cultural stability and coherence are dropped, the results are hard to generalize. While researchers should pursue the avenues opened up by the constructionist view, further research within the realist view is also called for due to the need for large scale studies that can generalize the insights of case studies across several acquisition cases.

This study mostly follows the realist view of culture and, accordingly, reflects the integration perspective. The literature review on culture, which is presented in the following, is based mainly on the literature following realist and integrationist traditions. Based on this theoretical positioning, the approach in the empirical part of this study is quantitative. The empirical part examines high-ranking managers’ views that tend to follow an integrationist perspective. The level of analysis is at the firm level. In addition, the choice of a survey method that concentrates on the firm level reflects an integration perspective. Detailed case studies would be required to obtain the necessary nuances for the differentiation and fragmentation perspectives.

3.2. Multilevel View of Culture

The multi-level approach views culture as a construct that consists of five levels nested within each other (Leung, Bhagat, Buchan, Erez, & Gibson 2005). The most macro-level is the global culture that is created by global networks and global institutions. Below the global level are nested organizations and networks at national level with their local cultures varying from one nation or network to another. Further down are local organizations that vary in the organizational cultures. Within each organization are sub-units and groups that share the common national and organizational culture, but differ on the basis of the differences in their functions, leaders, and the professional and educational level of their members. At the bottom are individuals who acquire their cultural values from higher levels of culture through the process of socialization. (Leung et al. 2005)

Previous empirical acquisition studies have mostly ignored the multilevel nature of culture. Apart from the few studies including both national and organizational cultures simultaneously (Very et al. 1996, Very et al. 1997, Weber et al. 1996), the focus has been on one level of culture only (Teerikangas & Very 2006). The inclusion of both national and organizational levels of culture is called for in order to understand the cultural complexities in acquisitions and to separate the effects of organizational and national cultures (Teerikangas & Very 2006; Weber et al. 1996). To address these concerns, the level of analysis in this thesis is at both the national and the organizational
In the following, I will discuss both cultural levels in detail, starting with national culture.

3.3. National Culture

In the scope of the realist tradition, national culture can be defined as the collective programming of the mind acquired by growing up in a particular country (Hofstede 1991). National culture is reflected in basic values, such as feelings of right and wrong, good and evil, beautiful and ugly, rational and irrational (Olie 1990). National culture impacts many forms of organizational behavior, ranging from decision-making styles and human resource management to behavior in groups (Kirkman, Lowe, & Gibson 2006).

National culture is treated as a relatively stable feature that changes very slowly (Erez & Earley 1993, Hofstede 2001). The assumption of cultural stability enables the researcher to search for a fit between a given culture and managerial practices (Erez & Earley 1993). Leung et al. (2005) argue that the assumption of cultural stability is valid as long as there are no environmental changes that precipitate adaptation and cultural change. Leung et al. (2005) argue that cultural change has rarely been addressed at the national level. One important exception is the study of Ralston et al. (2008). Two mechanisms through which national cultures change are identified: national cultural convergence, which implies that the value systems of different countries become increasingly the same, and national cultural crossvergence, which implies that people develop new and unique value systems, which are “something different” rather than something “in between” compared with the old value systems.

In this study, I adopt the view of national culture as a stable and external (not controllable by the management) variable. I argue that even if national cultures do change, national cultural change is so gradual that national culture can be assumed as a constant during the post-acquisition integration process.

3.3.1. National Cultural Differences

Adler (1997) points out that, although organizations worldwide are growing more similar, the behavior of people within organizations is maintaining its national cultural uniqueness. For instance, organizations in Germany and the Netherlands may look increasingly similar from the outside, but Germans and Dutch continue to behave differently within their organizations. Olie (2005) describes how these differences became apparent in German-Dutch mergers:

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24 This is not to say that other levels of culture – global, group, and individual – do not play a role in acquisitions. However, trying to capture all levels in one study would be difficult. Moreover, group and individual levels are better depicted with qualitative methodologies.

25 For rare exceptions of dynamic models of national culture, see Berry, Poortinga, Segall, & Dasen, (2002) and Kitayama (2002).

26 It should be noted that this definition of cultural crossvergence corresponds to the newer and broader definition of cultural crossvergence as “the development of new and unique value systems” (Ralston et al. 2008), not to the narrow definition of cultural convergence as a value set that is “in between” (Ralston et al. 1993).
“For the Germans, meetings had a strong task-oriented character. They were primarily means to state clear goals and to assign tasks. Germans appeared strongly committed to a decision or strategy once it had been stated. The Dutch decision-making style, by contrast, reflected more the societal tendency of creating balances. Meetings were perceived as a platform for exchanging ideas and information rather than as a simple preparation for further action. Consensus-building was an important value that made decision making and implementation much slower and more time-consuming than the German management was used to.” (Page 339)

In order to understand how national cultures differ, several authors have attempted to identify national cultural differences, which can be defined as dimensions along which national cultures differ from each other (Hofstede 1980). In the following, I will present three classifications of national cultural differences based on Hofstede (1980), Hampden-Turner and Trompenaars (2000), and House, Hanges, Javidan, Dorfman & Gupta (2004).27

Although cultural dimensions have been around since the early 1960s in the field of intercultural research, Hofstede (1980) popularized the dimensions paradigm. Hofstede (1980) included four dimensions along which national cultures differ based on his study of IBM subsidiaries around the world: power distance, individualism vs. collectivism, masculinity vs. femininity, and weak vs. strong uncertainty avoidance. Later, he added an additional fifth dimension: long-term vs. short-term orientation (Hofstede 1991). Each country was assigned national cultural scores along these dimensions. Because of Hofstede’s (1980) study, national culture became easily quantifiable for researchers and could be used as an independent or control variable in studies that dealt with various international business phenomena. As a result, Hofstede’s framework (1980) revolutionized the research on national culture and national cultural differences in international business.

Hampden-Turner and Trompenaars (2000) introduced an alternative framework for national cultural differences. They conceptualize six dimensions of national cultural differences: universalism vs. particularism, individualism vs. communitarianism, specificity vs. diffusion, achieved status vs. ascribed status, inner direction vs. outer direction, and sequential time vs. synchronous time. Many dimensions overlap with those of Hofstede’s, but additional aspects are also introduced, namely differences in status and motivation (inner vs. outer direction). Although Hampden-Turner and Trompenaars’ (2000) dimensions are theoretically sound and based on a more recent study than Hofstede’s, empirical research in international business has favored Hofstede’s dimensions.28

A recent contribution to national cultural dimensions literature is the framework of House et al. (2004). It is based on a cross-cultural research project called “Global

27Additional national cultural classifications have been suggested, too. In the 1980s, Ronen and Shenkar (1985) presented a classification that divided countries into eight culturally distinct blocks. In the 1990s, Schwartz (1994) identified the following dimensions: conservatism, intellectual and affective autonomy, hierarchy, egalitarian commitment, mastery, and harmony. In a comparative study, Drogendijk and Slagen (2006) found that the explanatory power of the Hofstede and Schwartz-based measures was comparable. More recently, Inglehart, Basanez, and Moreno (1998) and Inglehart, Basanez, Diez-Medrano, Halman, and Luijks (2004) coordinated the World Values Survey in 81 countries. In addition, Schwartz and Bardi (2001) studied national cultural differences based on event management – how common work events are handled in organizations in different countries.

28 For a review of empirical research using Hofstede’s framework, see Kirkman et al. (2006).
Leadership and Organizational Behavior Effectiveness” (GLOBE). The GLOBE study attempted to build an instrument for national cultural differences based on a rigorous study design and the use of advanced analysis methods. House et al. (2004) discovered nine distinct cultural dimensions: performance orientation, assertiveness, future orientation, humane orientation, institutional collectivism, in-group collectivism, gender egalitarianism, power distance, and uncertainty avoidance. Each one was conceptualized in two ways: practices (culture as is), and values (culture as should be). People in a society or an organization rated both practices and values.

Researchers in the GLOBE study (House et al. 2004) attempted to address the criticism towards Hofstede’s measures in the following ways: 1) the GLOBE study also used qualitative methods to assist the development of quantitative survey instruments, 2) the GLOBE study is not based solely on nations (for instance, French and English-speaking Canada are separated), 3) the data is collected in 951 organizations instead of just one, 4) data collection is more recent than Hofstede’s (1980), and 5) the GLOBE study has 9 dimensions.

Hofstede and the GLOBE researchers are keen to point out the differences in their studies (Hofstede 2006, Javidan, House, Dorfman, Hanges, & Sully de Luque 2006). However, both studies use the same approach based on anthropological literature that reduces culture to dimensions (Earley, 2006). Pearce and Osmond (1996) criticize the fact that the dimensional approach lacks depth in describing cultural mind-sets and ignores the institutional molding of these mind-sets. Pearce and Osmond (1996) also disapprove of the integrationist view of culture in both Hofstede’s study and the GLOBE study that neglect the possible sub-cultures.

Despite criticism, the dimensional approach is widely used in quantitative research because it has several attractive characteristics. First, the use of factor analysis enhances the validity of the constructs and the reliability and validity of the estimates (Kogut & Singh 1988). Second, the validity of national cultural dimensions appears to hold true over time. Third, the dimensional approach is often the best measure available when used in studies based on large-scale surveys. As an external measure, the dimensional approach reduces the likelihood of common method bias in surveys compared with perceptual measures. Fourth, the use of established dimensions makes the study results more comparable than if each international business study opted to develop a new measure. Fifth, national cultural dimensions seem to work well in large-scale survey studies that aim to establish the general impact of national culture on a particular research phenomenon.

I argue that whereas national cultural dimensions are problematic when attempting to develop an in-depth understanding of a specific culture (Pearce & Osmond 1996), they are less problematic when the aim is to obtain a more general understanding of the impact of national cultural differences in a specific international business context. Based

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29 National cultural distance measures utilizing Hofstede’s (1980) scores have been widely criticized (Harzing, 2004; McSweeney, 2002; Shenkar, 2001; Tayeb, 1994).

30 A recent comparative study of Drogendijk and Slangen (2006) found Hofstede-based measures to be comparable with more recent Schwarz-based measures (Schwarz 1994) and superior to perceptual measures. They concluded that it may be premature to dismiss Hofstede’s work as outdated or as inaccurately reflecting national cultures (Drogendijk & Slangen, 2006).
on this argument, I use the dimensional approach in the empirical part of the thesis. I use the GLOBE measures (House et al. 2004) of national cultural differences because the GLOBE measures are based on more advanced analysis methods and more extensive reliability and validity checks compared to other dimensional studies.31

3.3.2. National Cultural Differences in Acquisitions

As acquisition activity has become increasingly international, the focus in acquisition studies has widened from domestic issues to considering factors characteristic to foreign acquisitions. Foreign acquisitions involve the combination of two organizations that are embedded in two national cultural and institutional contexts that affect the firms’ structures and management (Olie 2005).

On the most basic level, quantitative acquisition researchers have compared how domestic and foreign acquisitions differ by including a dummy variable to represent a domestic vs. a foreign acquisition. Current evidence of these studies remains highly fragmented and inconclusive. Some studies have reported negative outcomes in foreign acquisitions, such as lower profitability (Bühner 1991), higher top management turnover (Krug & Hegarty 1997), and higher employee resistance (Larsson & Finkelstein 1999). Other studies have showed positive outcomes in foreign acquisitions, including higher cumulative abnormal returns (Bühner 1991, Swenson 1993), and higher average bid premiums (Harris & Ravenscraft 1991). At the same time, a large number of studies have established that no differences existed in aspects such as synergy realization (Larsson & Finkelstein 1999), growth in sales (Lubatkin et al. 1998), performance index (Very et al. 1996), cumulative abnormal returns (Dewenter 1995), stock prices (Eddy & Seifert 1984), degree of acculturation (Larsson & Lubatkin 2001), and acculturative stress (Very et al. 1996).

On a deeper level, based on general literature on national cultural differences, acquisition researchers have argued that national cultural differences impact post-acquisition integration. However, as discussed in the following, there is currently no consensus on the impact mechanisms and the direction of impact, negative or positive, concerning national cultural differences and acquisition outcomes.32

The more traditional research stream argues that the more divergent the national cultural contexts, the more difficult it will be to integrate the firms (Olie 2005). Several theoretical arguments have been put forward in previous research. To name a few, Datta and Puia (1995) argue that national culture differences result in an inadequate understanding of the foreign market and the foreign firm. This can lead to the acquiring

31 I tested all empirical models of this thesis by using Hofstede’s (1980) scores. The results remained essentially the same. This provides empirical evidence for the claim by Earley (2006) that both Hofstede’s (1980) and House et al.’s (2004) studies are minor variants of one another’s styles and should provide very similar results.

32 The debate on whether two organizations joining their forces should be similar or dissimilar – strategically or culturally – is not limited to acquisition studies. The debate is characteristic to all research streams that explore different types of inter-firm cooperation. For instance, a similar debate on the impact of strategic and cultural differences is found in the strategic alliance literature (see Porter and Fuller, 1986; Nonaka & Takeuchi, 1995; Chan & Heide, 1993).
firm overpaying for the acquisition. Further, Datta and Puia (1995) suggest that many competencies, particularly those in functional areas such as marketing and labor relationships, are specific to one national culture. Given cultural distance, it is less likely that knowledge about local markets is available to the acquiring firm management, which may result in overpaying or less than ideal marketing strategies (Datta & Puia 1995). In addition, Olie (2005) suggests that large national culture differences between the countries of origin will diminish the likelihood that managers from both countries will have similar orientations to organizational life and risk-taking, which may increase miscommunications and frictions. Problems are also caused by a lack of a common frame of reference that would serve as a coordination mechanism (Olie 1994). Furthermore, Olie (2005) suggests that, as people tend to make in-group vs. out-group categorizations on the basis of nationality, national cultural differences may increase integration problems. Additionally, Vaara et al. (2003b) argue that, in merger settings, national cultural stereotypes can increase the negative in-group vs. out-group categorizations. Finally, Datta and Puia (1995) propose that transfer of knowledge between the acquiring and acquired companies may be more difficult if the cultural differences are large because of a lack of shared understanding of how things are done.

Empirical evidence exists for negative performance effects of national cultural differences. Datta and Puia (1995) found that acquisitions characterized by high national cultural differences resulted in lower wealth effects for acquiring firm shareholders. In addition, Krug and Hegarty (1997) discovered that the top managers of the acquired firm had less favorable perceptions of the acquisitions when the acquiring company was a foreign multinational company. The results led Krug and Hegarty (1997) to suggest that foreignness has a potentially negative effect on how top managers view acquisition. In a similar study, Krug and Nigh (1998) showed that national cultural differences were related to high top management turnover in the acquired company. Moreover, Van Oudenhoven and Van der Zee (2002) found that cultural similarity, both at national and organizational cultural levels, was significantly correlated with cooperation success. Finally, Brock (2005) showed that national cultural differences increased integration related problems and resource-sharing difficulties in acquisitions.

Case studies present similar findings supporting the argument that national cultural differences negatively impact post-acquisition integration. The case study by Olie (1994) reported problems related to Dutch-German mergers. Similarly, Kühlmann and Dowling (2005) identified national cultural differences as one of the factors that contributed to misunderstandings and conflict in the DaimlerChrysler merger. Additionally, another case study by Olie (2005) found that decision-making and interpersonal styles related to the German and Dutch national cultures were a source of frustration in Dutch-German mergers. Olie (2005) concluded that although national cultural differences may have beneficial outcomes, his three cases demonstrated that, most likely, national cultural differences increase post-acquisition integration problems. Furthermore, Hellgren et al. (2002) showed how national identification can become the platform of the “winner” and “loser” setting in foreign acquisitions. Identifying merging companies and key individuals within the merging companies as representatives of specific nations broadened questions of winning and losing into a framework of

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33 The study examined different forms of cooperation. 67% of the sample was joint ventures, 22% strategic alliances, and 11% mergers.
nationalistic discourse, which articulated specific collective, national identities (Hellgren et al. 2002). Similar finding is presented in the study of Tienari et al. (2003) that showed how nationalistic sentiments often came to the forefront in foreign acquisitions to the extent that, in public discussion, the companies in question become associated with national interests. According to Vaara et al. (2003c), in acquisitions, nations often became to be seen as “cultural competitors” reflecting similar sentiments in warfare and sports. National confrontation is problematic for key decision-makers if they want to successfully pursue post-acquisition integration:

“On the one hand, they [the key decision makers] have to position themselves as “beyond” the national confrontation while the expectation is that they represent specific nationalities and their interest.” (Vaara & Tienari 2003, Pages 91-92)

Case studies also show how the media can intensify the “us” and “them” confrontations based on nationality. Risberg et al. (2003) found that, within the discursive framework of media, mergers were discursively constructed as confrontation between “us” and “them” for the readers to identify with. Accordingly, Tienari et al. (2003) found that the media can reinforce nationalism and national identity. Thus, the media texts both construct national identities and reflect commonly held stereotypes (Risberg et al. 2003). Vaara et al. (2003b) showed that national stereotypes served as a means to make sense of the history, current status and future challenges of the merging organizations in foreign acquisitions. Stereotypes became taken-for-granted attributes that could be attached to people representing specific nationalities. However, the problem was that the stereotypes brought with them prejudices that had long-standing social consequences:

“While it is easy to dismiss stereotypes as interesting but unimportant, it is dangerous not to take a critical view of these cultural representations and categorizations, full of prejudice and political implications.” (Vaara et al. 2003b, Page 63)

However, there is also an opposite view that sees national cultural differences as a source of value instead of a liability. From a resource based view, researchers have argued that different countries have different resources and, therefore, different strengths. Hofstede (1991) distinguishes different strengths related to his four national culture dimensions (see Table 1). Complementary strengths can be combined by integrating acquiring and acquired firms’ operations. Therefore, Larsson and Finkelstein (1999), and Shenkar (2001) argue that complementary differences benefit both firms in terms of positive synergy effects (Larsson & Finkelstein 1999, Shenkar 2001). Larsson and Finkelstein (1999) suggest that combination potential may be more complementary, and hence less threatening, in acquisitions that are culturally distant. Additionally, managers may pay more attention to cultural issues when combining firms in culturally different countries than when acquiring a firm in a culturally close country (Larsson & Finkelstein 1999). Together, a less threatening combination potential and more attention to cultural issues could potentially increase synergy realization and reduce conflict in culturally distant acquisitions.
There is empirical evidence against the traditional belief of a negative relationship between national cultural differences and acquisition outcomes. Several case studies report problems particularly in acquisitions between culturally close countries. For example, Olie (1994) reported culture-related problems in Dutch-German mergers, and Vaara’s (2002) presented unsuccessful Finnish-Swedish mergers that suffered from cultural problems. In the same way, Fang et al. (2004) presented a Swedish-Norwegian merger that failed despite apparently similar national cultures. As one reason for the failure, Fang et al. (2004) identified the lack of cultural preparation on both sides due to the expected national cultural similarities. This phenomenon is referred to as *psychic distance paradox*. Operations in psychically close countries may result in failure because the perception of similarity with home country prevents the managers from addressing the subtle, but critical, differences which exist between the countries (Fenwich, Edwards, & Buckley 2003, O’Grady & Lane 1996). As Vaara et al. (2003b) point out:

“Even though the Nordic region is often perceived by outsider to be relatively homogenous area, people in the four Nordic nations seem to perceive differences between their respective national cultures.” (Page 61)

Fang et al. (2004) go as far as to suggest that historical sentiments, feelings, and emotions specific to certain cultures and accumulated over a long period of time may better explain behavior than cultural dimensions. The shared history between the countries becomes activated in making sense of, and giving sense to, the acquisition
(Risberg et al. 2003). For example, in a Swedish-Finnish merger, Risberg et al. 2003 found a discursive (re)construction of asymmetric power relations; superior (Swedish) and inferior (Finnish) national identities, which were embedded in the history of domination between the two nations.

Quantitative studies have provided evidence for a positive relationship between national cultural differences and post-acquisition performance, too. Morosini et al. (1998) found a positive association between national cultural distance index and acquisition performance. Hébert et al. (2005) discovered that cultural distance increased the chances of survival in foreign acquisitions. In addition, Weber et al. (1996) found that differences in power distance were positively correlated with integration, and differences in individualism were positively correlated with the level of cooperation. Furthermore, Larsson and Finkelstein (1999) showed that foreign acquisitions offered more combination potential than domestic acquisitions. Additionally, Morosini et al. (1994) found that national cultural differences were positively related to sales growth when an independence strategy was used. Finally, Slangen (2006) showed that the level of post-acquisition integration moderated the relationship between national cultural distance and cross-border acquisition performance, with national cultural distance having a negative impact on performance at high levels of integration, and a positive impact at low levels. Taken together, these results imply that national cultural differences do not necessarily result in negative consequences compared with domestic acquisitions or acquisitions with small national cultural differences.

The inconsistent and even contradictory results – against national cultural differences on one hand, and in favor of cultural differences on the other hand – suggest that the impact of national cultural differences on acquisitions remains an interesting and valuable area for research. National cultural differences will be explored in all essays included in this thesis. In Essay 1, national cultural differences are examined at a very basic level in terms of domestic vs. international comparisons. In Essays 2-5, the impact of national cultural differences is explored in relation to different post-acquisition outcomes (conflict in Essay 2 and 4, knowledge transfer in Essay 3, 4 and 5, and synergy in Essay 5).

3.4. Organizational Culture

3.4.1. Definition and Levels of Organizational Culture

Schein’s (1990) definitions and levels of organizational culture, presented below, follow the integrationist tradition. According to Schein (1990), organizational culture is:

“A pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems.” (Page 111)

Schein (1990) identifies three levels of organizational culture: artifacts, values and underlying basic assumptions (see Table 2).
According to Schein (1990), the first organizational culture level, artifacts, is composed of the visible organizational structures and behaviors within an organization. Consequently, organizational structure is one of the major manifestations of culture (Nahavandi & Malekzadeh 1993). The second, deeper level of culture is composed of values held by the members of an organization. These values indicate what ought to be and determine what is considered acceptable. The values are reflected in the strategies, goals, and philosophies of the organization. Schein (1990) emphasizes that full understanding of the culture of an organization also requires knowledge of the basic underlying assumptions that guide both the development of values and the creation of artifacts. These underlying assumptions constitute the third level of culture (Schein, 1990). According to Schein (1990), senior management should focus on underlying assumptions. He argues that artifacts can be replaced and new values can be articulated, but unless the basic assumptions are addressed, the firm’s culture will likely remain the same (Schein 1990).

3.4.2. Organizational Cultural Differences in Acquisitions

In both domestic and foreign acquisitions, two organizational cultures come together. Utilizing Schein’s (1990) framework, I define organizational cultural differences as the differences in artifacts, values, and underlying assumptions between the acquiring and the acquired firm.

Most cultural perspective advocates argue that organizational cultural similarity creates a sense of cohesion and leads to positive organizational consequences, such as achievement of potential synergies (Lodorfos & Boateng 2006). Organizational cultural
differences, on the other hand, are seen as major causes of human resource problems during post-acquisition integration. These human resource problems are conceptualized in several ways. For instance, **merger syndrome** consists of feelings of uncertainty and insecurity as a result of the acquisition (Marks & Mirvis 1986). **Culture clash** refers to the negative emotional reactions of organizational members towards the acquisition (Elsass & Veiga 1994) and **culture collision** describes organizational problems resulting from organizational cultural differences (Cartwright & Cooper 1993).

Several underlying theoretical reasons for human resource problems have been suggested. First, according to Cartwright and McCarthy (2005), theories of social attraction suggest that groups form stereotypical and negative attitudes toward other groups which they perceive to be different:

> “Characteristically, employees focus on perceived cultural differences rather than similarities and see each other as competitors, reckoning that gains on one side will be matched by losses on the other side. A ‘we’ and ‘them’ mentality seems to inevitably develop and territorial battles ensue over a range of major and often minor issues.” (Page 255)

Cartwright and McCarthy (2005) argue that even when there is little measurable difference in the objective content of two cultures, differences will be socially created to legitimize old identities. This view is consistent with social identity theory and justifies the use of perceptual measures of organizational cultural differences, instead of differences based on more tangible aspects.

In addition, problems can occur because members of two organizations with very different organizational cultures have difficulties in understanding each other (Nahavandi & Malekzadeh 1993, Olie 1994). Imperfectly shared understandings between the acquiring and acquired firms cause ambiguity and may lead to post-acquisition conflict (David & Singh 1993). Finally, organizational cultural differences can lead to **cultural ambiguity** – a situation characterized by uncertainties concerning whose culture will dominate (Datta 1991). Even if the dominant culture is clear, many organizational members may feel that they do not fit into the dominant culture (Cartwright & Cooper 1996).

Empirical evidence supports the theoretical arguments concerning the negative influence of organizational cultural differences. First, Datta (1991) found that organizational cultural differences were negatively related to overall post-acquisition performance. Second, Chatterjee, Lubatkin, Schweiger, & Weber (1992) showed that organizational cultural differences were negatively associated with the creation of shareholder value in acquisitions. Third, David and Singh (1993) linked organizational cultural differences to cultural conflict. Fourth, Elsass and Veiga (1994) as well as Weber et al. (1996) found support for the positive relationship between organizational cultural differences and high levels of stress, tension, anger, lower commitment, and negative attitudes toward cooperation. Fifth, in laboratory experiments, Weber and Camerer (2003) established a negative relationship between organizational cultural differences and performance and linked cultural differences to conflict and mistaken blame. They demonstrated how difficult it is to merge cultures of two different companies once they are established (Weber & Camerer 2003). Similar results were presented in the study of Yu et al. (2005) which showed the persistence of cultural mental models. Yu et al. (2005) argued that once organizational members make sense of
their experiences in a particular way, they are often unable to entertain different explanations for their circumstances. Sixth, Lubatkin, Schweiger, and Weber (1999) showed that high organizational cultural differences were linked to higher top-management turnover. Seventh, Biljsma-Frankema (2001) found that organizational cultural differences were related to low levels of trust and cooperation. Eighth, Bliško et al. (2000) showed that organizational cultural differences can complicate the realization of acquisition synergies. Finally, Lodorfos and Boateng (2006) indicated that almost all the interviewees agreed that acquisitions failed to achieve the expected outcomes of the merger because of incompatible cultures.

However, recent acquisition studies have started to question and criticize the focus on the negative effects of organizational cultural differences. Larsson and Finkelstein (1999) showed that organizational cultural differences – in terms of complementary resources – can increase the potential for synergy realization. Also, Krishnan, Miller, and Judge (1997) found that differences in the functional backgrounds of the managers were positively related to post-acquisition performance.

On a more general level, Newman and Chaharbagi (1998) criticize studies on organizational cultural differences by stating that there is a bias in cultural studies because they are mostly against cultural differences. Similarly, Riad (2005) warns that when writing about acquisitions, authors need to be wary of the legacy of discursive elements that demonize organizational culture through the implication of difference with clash. Thus, the focus on organizational culture can be counterproductive because it legitimates differences and polarizes contrasts between the acquiring and the acquired firm. Riad (2005) explains:

“… while the intuitive assumption is that attention to ‘organizational culture’ could enable merger integration, it also enables resistance by legitimating people’s opposition to the different measures introduced – by providing them with various discursive elements in support of their actions. It also legitimates managerial interventions in mergers by enabling them to ascribe their actions as attempts to overcome ‘cultural differences’ and to weed out the ‘wrong’ elements of an ‘organizational culture’.” (Page 1549)

Morosini et al. (1994) call the tendency to systematically over-estimate the effects of culture in acquisitions “cultural myth”. There is some evidence for cultural myth in acquisitions. Vaara (2002) found that cultural discourse – explaining success/failure with cultural differences – can be particularly suitable for narratives of acquisition failure. In addition, Weber et al. (1996) found that perceived organizational cultural differences were negatively associated with the effectiveness of the integration process, but not significantly associated with financial performance. Thus, poor financial performance could not be directly attributed to organizational cultural differences, even though organizational cultural differences made the integration process more difficult.

Riad (2005) encourages acquisition researchers to re-examine cultural differences through rigorous analysis of why cultural differences matter and what their productive effects can be. She urges researchers to be critical about the tendency in previous studies to simplify cultural differences into divisive binaries (Riad 2005).

In this thesis, I explore the differences in organizational cultural differences between domestic and foreign acquisitions (Essay 1). In addition, I examine the impact of
organizational cultural differences on different post-acquisition outcomes (conflict in Essay 2 and 4, on knowledge transfer in Essay 3, 4, 5, and on synergy in Essay 5) in order to better understand the impact mechanisms of organizational cultural differences and to avoid simplistic views of organizational cultural differences as entirely “good” or “bad”.

3.5. Beyond Cultural Differences: Acculturation Factors

Although acquisition studies within the cultural perspective have tended to concentrate on the impact of cultural differences, there are additional cultural factors that should be considered, too. By applying the theory of acculturation in the acquisition context, several of these cultural factors can be identified. I will first discuss acculturation in general, then reflect on its use in acquisition research, and finally identify cultural factors derived from acculturation theory.

3.5.1. Acculturation Theory

Acculturation theory originates from research in anthropology and intercultural psychology. The theory of acculturation, as proposed by Berry (1980), is derived from the social movement theory, which explains how populations of immigrants acculturate in their new host country. Hence, the level of analysis was originally at the national cultural level.

From the 1980s onwards, acculturation theory has been increasingly applied to organizational level phenomena. Monin (2002) provides examples of acculturation situations in the organizational context (see Table 3) in which acculturation can be defined as changes that occur as a result of contact between cultural groups (Berry 1980). Acculturation situations are characterized by the domination of one group over another – either physical or symbolic – and take place at two levels: individual and group level (Monin 2002). Research on acculturation in anthropology tends to focus on the group level, whereas research on acculturation in intercultural psychology is more interested in the individual level (Monin 2002). According to him, the acculturation intensity depends on three criteria: whether the interaction is obligatory or not, the duration of the integration, and the frequency of interaction.

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34 It can be questioned whether social movement theory, which focuses on the national cultural level, can be borrowed and applied to organizational level phenomena, such as acquisitions. In this thesis, I make a strong distinction between cultural levels and consider national culture as a constant, which is the assumption in most acquisition studies on national culture. Yet, social movement theory, from which acculturation theory is derived from, does not view national culture as a constant, but as something determined by the environment. This is an interesting paradox.
### Acculturation intensity: Low

<table>
<thead>
<tr>
<th>Anthropology</th>
<th>Intercultural psychology</th>
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<tr>
<td>Partial use of the anthropological theory of acculturation:</td>
<td>Partial use of the psychological theory of acculturation:</td>
</tr>
<tr>
<td>- Domestic and international consortiums</td>
<td>- International technology transfer</td>
</tr>
<tr>
<td>- Tourist industry</td>
<td>- Functioning of multicultural virtual teams</td>
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**Use of both anthropological and psychological theory of acculturation: International strategic alliances**

### Acculturation intensity: High

<table>
<thead>
<tr>
<th>Anthropology</th>
<th>Intercultural psychology</th>
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<tr>
<td>Use of the entire anthropological theory of acculturation:</td>
<td>Use of the entire psychological theory of acculturation:</td>
</tr>
<tr>
<td>- Domestic and international acquisitions</td>
<td>- Managing international human resources</td>
</tr>
<tr>
<td>- Management of headquarter-subsidiary relationships in multinational companies</td>
<td>- Impatriation and expatriation</td>
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<td></td>
<td>- Functioning of international multicultural teams</td>
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**Table 3  Typologies of the contexts in which acculturation theories are used**

Source: Based on Monin (2002), page 94.

### 3.5.1.1. The Acculturation Process in Acquisitions

Based on Monin’s (2002) classification, domestic and international acquisitions present a situation of high acculturation intensity. This suggests that acculturation theory is very relevant in the acquisition context, and in fact, acculturation theories based on anthropology have been found especially useful in this regard. Studies that analyze acquisitions through acculturation theory argue that success of post-acquisition integration depends mainly on the nature of the relationship between the acquiring and the acquired firms (Birkinshaw et al. 2000, Buono & Bowditch 1989; Nahavandi & Malekzadeh 1988; Sales & Mirvis 1984, Very et al. 1997). In other words, it is the nature of the relationship and not the extent of cultural differences that defines the acculturation process and, subsequently, the outcome of the post-acquisition integration.

Based on the work of Berry (1980), Nahavandi and Malekzadeh (1988, 1993) identify four modes through which acculturation process takes place in acquisitions. The first mode is called integration, which describes an acculturation process where the acquired firm wants to preserve its own culture and identity, and seeks to remain autonomous and independent. The integration mode leads to structural assimilation of two cultures with little cultural and behavioral assimilation. The second mode in the model of Nahavandi and Malekzadeh (1993) is assimilation. In this mode, the acquired firm is

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35 Nahavandi and Malekzadeh (1993) use the term “integration” in a narrow sense to represent one form of acculturation. This is not to be confused with the more general term “integration” used in acquisition literature that refers to the post-acquisition integration process in general.
absorbed into the acquirer and ceases to exist as a cultural entity. The third mode, *separation*, describes an acculturation process where there is minimal cultural exchange between the two groups and each will function independently. The fourth mode is *deculturation*, which is a defunctional mode and involves the acquired company losing cultural and psychological contact with both one’s own group and the other group.

From the way Nahavandi and Malekzadeh (1993) describe the four acculturation modes, one can interpret that “assimilation” represents the tightest way of combining the two companies since the acquired company’s culture is fully combined with that of the acquirer. In this sense, it corresponds to what Haspeslagh and Jemison (1991) term the “absorption” approach to integration. The “integration” mode is a looser way to combine two organizations as only little cultural and behavioral assimilation happens between the companies although they are structurally assimilated. This mode correspond to Haspeslagh and Jemison (1991) “preservation” and “symbiosis” approaches to integration. Separation” implies a more holding type of structure, where both organizations continue functioning independently after the acquisition. Finally, “deculturation” implies the failure of the integration process because the acquired company is not successfully integrated into the acquiring company, yet the old culture is not attractive either.

One can criticize Nahavandi and Malekzadeh’s (1988, 1993) framework because it focuses on the changes happening in the *acquired* company during the acculturation process. This focus on the acquired firm can be understood in the light of the anthropological and intercultural psychology origins of the acculturation theory. The anthropological theory assumes a domination of one group over another whereas, in intercultural psychology, when an individual adjusts to a new national culture, it is more likely that the individual, rather than the new host culture, adapts. However, the one-sided focus of acculturation theory becomes a limitation when applied in the acquisition context because cultural changes are often needed not only in the acquired but also in the acquiring firm (Haspeslagh & Jemison 1991).

### 3.5.1.2. Acculturation Factors in Acquisitions

Several cultural factors that impact post-acquisition integration can be derived from acculturation theory. They include *multiculturalism, cultural preservation*, and *partner attractiveness* (Nahavandi and Malekzadeh 1988, 1993)\(^{36}\). I refer to these three factors collectively as *acculturation factors*.

The first acculturation factor, *multiculturalism*, is the extent to which the firm contains many different cultural groups, and the extent to which this cultural diversity is valued and tolerated (Pablo 1994). Nahavandi and Malekzadeh (1993) suggest that multiculturalism matters particularly on the acquiring company side. They argue that the greater the degree of multiculturalism of the acquirer the greater the respect for cultural differences. Therefore, a multicultural acquirer is more likely to understand the

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\(^{36}\) According to Nahavandi and Malekzadeh (1988), an additional factor that determines the acculturation mode is the degree of relatedness between the firms. Since relatedness is related to strategic rather than cultural aspects of the firm, I do not include it in the discussion here. Relatedness was discussed earlier as one of the themes in the strategic management perspective on post-acquisition integration.
value that may be embedded in the cultural differences and simultaneously less likely to impose a dominant integration mode in situations where it is inappropriate (Datta & Grant 1990). Pablo (1994) found in her empirical study that multiculturalism was negatively related to the level of integration chosen.

The second acculturation factor, cultural preservation, refers to the firm’s desire to keep its own culture after the acquisition has taken place. The deepest mode of integration, assimilation, requires that very little cultural preservation exists in the acquired company (Nahavandi and Malekzadeh 1993). The stronger the cultural preservation tendency, the less willing the acquired company is to integrate into the acquiring company (Elsass & Veiga 1994). Cultural preservation is further linked to a wider issue of how the acquisition should be managed in terms of the degree of autonomy that the acquired company should be granted. Haspeslagh and Jemison (1991) argue that there are situations in which the desire to preserve an organization’s own culture is justified, which makes autonomy essential to the preservation of the strategic capabilities that were bought with the acquisition. Therefore, attention is shifted away from cultural differences as such and toward whether preserving these differences will be useful in the long term.

Finally, partner attractiveness is defined as the extent to which members of one firm admire and value the culture, managerial style, and performance of the other firm (Nahavandi & Malekzadeh 1988). Nahavandi and Malekzadeh (1988) suggest that the way the acquired firm views the acquirer is essential to acquisition integration. “Partner attractiveness” is required for integration modes that involve deeper integration (Nahavandi & Malekzadeh 1988, Hitt et al. 1998), which in turn facilitates the creation and exploitation of synergy (Hitt et al. 1998). Haspeslagh and Jemison (1991) note that partner attractiveness also positively affects knowledge transfer by helping the management to create a positive atmosphere, which is essential for the transfer of tacit knowledge and skills. Teerikangas and Very (2006) argue that regardless of cultural differences partner attractiveness impacts the entire course of post-acquisition integration. In fact, Shenkar (2001) suggests that if partner attractiveness is absent, adjustment to a relatively similar culture could be as difficult as adjustment to a more distant culture.

A dominant feature in the model of Nahavandi and Malekzadeh (1988) is that each acculturation factor is considered to be important only on the acquiring or acquired firm’s side. For example, partner attractiveness and cultural preservation is emphasized for the acquired firm while multiculturalism is stressed on the acquiring firm’s side. In Essay 2, I question this assumption and argue that each acculturation factor should be considered on both acquiring and acquired firm side equally in order to acknowledge the reciprocal nature of post-acquisition integration.

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37 In acculturation theory, it is assumed that cultural preservation tendencies are particularly relevant on the acquired firm side. However, in Essay 2, I show that cultural preservation is important also on the acquiring firm’s side. Assuming that cultural preservation matters only on the acquired firm’s side disregards the reciprocal nature of the post-acquisition integration.
3.6. Beyond Cultural Differences: Integration Process Factors

Acquisition studies have tended to take a static perspective instead of a dynamic one. Olie (2005) criticizes the fact that strategic fit is often approached as a static concept, even if case studies show that strategic fit can change into a strategic mismatch and vice versa. Studies within the cultural perspective have also assumed stability. For instance, studies on organizational cultural differences concentrate on static differences between the companies before the acquisition took place. Such an approach is limited because it excludes the dynamic nature of the acquisition process. Teerikangas and Very (2006) argue that a static view on acquisitions, which fails to account for the dynamic nature of the acquisition process, prevents researchers from understanding the relationship between culture and acquisition performance. Several studies show that the manner in which the organizational change processes are managed during the post-acquisition integration has a significant effect on the acquisition outcomes (Hapeslagh & Jemison 1991, Kavanagh & Ashkanasy 2006).

Although the theory of acculturation is dynamic, it is limited because of the explicit or implicit assumption that the acquirer’s culture dominates and, consequently, that change is taking place only in the acquired company. Sitkin and Pablo (2005) argue that integration is a more complex and interactive mutual adjustment process. Sitkin and Pablo (2005) suggest that integration requires significant change in the acquiring organization as well as in the acquired organization.

Previous research on integration process factors has mostly examined integration as a one-dimensional construct describing the level of structural and decision-making autonomy (Ranft & Lord 2002). However, as Schweiger & Walsh (1990) point out, organizations rarely remain totally autonomous or fully assimilated with respect to all areas. Ranft and Lord (2002) argue that integration is a complex, multidimensional construct that is worthy of further examination in the acquisition context. Seo and Hill (2005) affirm that acquisitions provide a unique context to study organizational change processes:

“M&A related organizational change is perhaps more complex than any other type of large-scale organizational change because it needs to simultaneously address both the intraorganizational dynamics of leading a large-scale organizational change and the interorganizational dynamics of blending two distinctive identities and culture into one.” (Page 439)

Following a multidimensional view of post-acquisition integration, Shrivastava (1986) divided post-acquisition integration into procedural, physical, and cultural integration.\footnote{Other classifications of integration have been presented, too. For example, Birkinshaw et al. (2000) distinguish task integration and human integration. Although different in terminology, task integration is similar to Shrivastava’s (1986) procedural and physical integration, while human integration corresponds closely to Shrivastava’s (1986) cultural integration. To give another example, Ranft and Lord (2002) discriminate between strategic, symbolic, and cultural autonomy. Shrivastava (1986) does not explicitly define a separate strategic level of integration, but both symbolic and cultural autonomy are largely integrated in his concept of cultural integration. Despite these differences, all three studies tend to agree on the separation between the more operational and the cultural sides of integration.} In the following, I will focus on cultural integration, which, according to Shrivastava (1986), is the most important level of integration.
3.6.1. Cultural Integration

Whereas operational integration represents the “hard” side of integration, cultural integration represents the ideological and human side of integration. Cultural integration involves developing an organizational culture with compatible value systems by combining the cultures and managerial viewpoints of the acquiring and the acquired firm (Shrivastava 1986).

In acquisition research, the level of cultural differences that has been considered when studying cultural integration is organizational cultural differences, as most of this research has taken place in domestic context. The level of analysis becomes more complex in a foreign context. One can argue that cultural integration implies that only organizational culture changes because national culture, at least on the short term, can be assumed constant. Yet, one can also argue that there is some embeddedness of organizational culture in national culture that needs to be taken into account and that may be very difficult to change. For example, Calori et al. (1997) found clear nationally-bound administrative heritages concerning the preference of “how to manage” in terms of centralized or decentralized decision-making. This would imply that cultural integration that goes against the administrative heritage is likely to be more difficult than cultural integration that is in line with the administrative heritage of the firm.

Stahl, Mendenhall, and Weber (2005) claim that attention to culture and people issues is most critical to acquisitions that require high levels of integration, due to the greater extent of contact and degree of change. Despite the importance of cultural integration, little research has examined how to manage it (Schweiger & Goulet 2005). Moreover, Schweiger and Goulet (2005) claim that most of the previous research on cultural integration has been based on anecdotes and case studies. A recent case study of Lodorfos and Boateng (2006) enhances our understanding on how to manage cultural integration in acquisitions, but the authors point out that future research should focus on cultural integration using a quantitative method, particularly multivariate analysis with a larger sample.

Cultural integration facilitates post-acquisition integration in several ways. First, the impact of cultural differences depends on cultural integration (Teerikangas & Very 2006). Cultural integration bridges the organizational cultural differences between the acquiring and the acquired companies by unifying organizational frames of reference (Sherwood, 1983). Thus, cultural integration limits the dysfunctional consequences of cultural differences, such as conflicts and organizational problems (Elsass & Veiga 1994). Through ethnographic research, Riad (2007) discovered that:

“While recognizing and acknowledging “cultural differences” are initial positive steps, the challenge in mergers is to discover or invent organizational grounds that would relate such differences constructively in the post-merger change process” (Pages 39-40).

Second, cultural integration facilitates communication between the members of the acquiring and the acquired firms by ensuring that they have the same assumptions and consistent mental maps (Sherwood 1983). Third, cultural integration functions as a form of social controlling that mediates the behavior of individuals (Teece et al. 1997).
Through cultural integration, firms can avoid the extensive use of other control mechanisms that may be detrimental to long-term goals, such as knowledge transfer and organizational learning. For example, Lei and Hitt (1995) argue that financial controls, that encourage cost efficiencies, can lead firms to focus more on low cost inputs rather than knowledge transfer and organizational learning. Fourth, cultural integration helps to create a climate of mutual trust and, thereby, reduces the negative employee reactions that destabilize the organization (Paine & Power 1984). Finally, cultural integration is an important mechanism to access tacit knowledge (Chaudhuri 2005). The majority of the acquired company’s knowledge is embedded in individuals, relationships, teams, and the culture of the acquired firm (Ranft & Lord 2000). Because embedded knowledge is difficult to access with only procedural and physical integration, lack of cultural integration may result in failures to reach the intended synergy benefits and growth potential in acquisitions (Björkman et al. 2005). In addition, negative employee reactions, related to refusal to cooperate in knowledge transfer, are likely to be decreased when a shared frame of reference and a shared vision are created through cultural integration. Both fear of exploitation (individuals’ tendency to value their own knowledge more highly) and fear of contamination (individuals’ tendency to perceive themselves as having a more up-market image than others) (Empson 2000) are likely to decrease through cultural integration. The results of the study of Vaara et al. (2003a) showed how changes in the organization structure, culture, and identity clearly supported knowledge transfer.

Because of the advantages of cultural integration presented above, it is not surprising that Shirastava (1986) and Evans and Pucik (2005) argue that cultural integration is the most critical and challenging type of integration. However, cultural integration may also have negative consequences. The uprooting of a predominant culture can be costly and cumbersome and generate cultural anxieties – a series of emotional responses – amongst organizational members (Styhre, Borjesson, & Wickenberg 2006). It is likely that cultural anxieties can be reduced if cultural integration is well planned and well executed. Yet, the case study of Lodorfos and Boateng (2006) revealed that cultural integration is often conducted on an ad-hoc basis:

“Most of the interviewees pointed out that before the merger, they did not have a finalized and complete culture integration strategy and in some cases that they had it was for the two extreme cases of either total cultural integration or total autonomy. This suggests that managers in merger cases did not have coherent and proactive strategies for optimizing the benefits of joining the two cultures together or for dealing with cultural problems and therefore decisions taken are at best tenuous and in some cases reactive in solving culture related issues.” (Pages 1413-1414)

Such ad-hoc efforts are likely to lead only to surface level cultural learning, which does not benefit integration and may even lead to dysfunctional outcomes. Schweiger and Goulet (2005) showed that only deep level cultural learning interventions can bridge cultural differences and enhance employee perceptions and attitudes that facilitate the integration of two firms into a new organization.

In the following, I present two mechanisms through which cultural integration can take place: cultural change and the creation of a new, shared culture. These mechanisms are empirically explored in Essay 1 and particularly in Essay 3.
3.6.1.1. Cultural Change

On national cultural level, Ralston et al. (2008) argued that national cultures are not static. Similarly, acquisition studies have argued that cultural differences at the organizational cultural level are not static throughout the post-acquisition integration (Teerikangas & Very 2006). Applying the cultural convergence concept of Ralston et al. (2008) on organizational cultural level, organizational cultural change is a form of organizational cultural integration in which the perception of organizational cultural differences is reduced and, as a result, the organizational cultures of the two companies become increasingly the same. In other words, cultural change measures the extent to which organizational members abandon pre-acquisition culture either on the acquiring or acquired firm side.

Cultural change is conceptually different from acculturation. Whereas acculturation takes place within the acquired firm only, cultural change can take place in either the acquiring or acquired firm or in both. In most cases, cultural change decreases cultural differences. While at the beginning, the two firms’ organizational cultures may be different, successful post-acquisition integration brings them closer to one another (Teerikangas & Very 2006). As cultural differences are likely to give rise to ego defenses that maintain the existing identities of the acquirer and target, the resolution of cultural differences through cultural change is necessary for successful integration efforts (Schweiger & Goulet 2005).

Compared to the research attention on examining impacts of cultural differences prior to the acquisition, significantly less research interest has been directed to the subsequent cultural change (Jöns et al. 2007). However, cultural change is a factor that should be included in theoretical and empirical models. For instance, Styhre et al. (2006) and Jöns et al. (2007) maintain that the research on organization culture should allocate cultural change a higher priority given its importance in acquisitions. Similarly, Sales and Mirvis (1984) argue that cultural change is inherent in acquisitions. Cultural change is triggered by the contact of the acquiring and acquired company and will stop only when a form of cultural integration is achieved that is fully acceptable to both parties (Sales & Mirvis 1984). Hence, when an “equilibrium” level of cultural integration is achieved, the remaining cultural differences are no longer a source of conflict.

However, cultural change is not easy. Cartwright and McCarthy (2005) argue that because culture provides stability, order, and cohesion, it is difficult to change, particularly if the culture is well established and there is strong cultural attachment. Nadler, Thies and Nadler (2001) and Kavanagh and Ashkanasy (2006) describe cultural change as a top-down process. They argue that, for cultural change to take place, the active engagement of top management is needed to lead the change process.

3.6.1.2. Creation of a New Shared Culture

On the national cultural level, Ralston et al. (2008) provide a definition for national cultural crossvergence as the development of new and unique value systems, which is

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39 Ralston et al. (2008) define national cultural convergence as the value systems of two different countries becoming the same.
“something different” rather than something “in between” compared with the old value systems. Applying the crossvergence concept of Ralston et al. (2008) on organizational cultural level and in the specific context of acquisition, we suggest that creation of a new shared culture is a form of organizational cultural integration through cultural crossvergence that results in a new and unique organizational culture that is “something different” from the former cultures of both the acquiring and the acquired firm. Thus, creation of a new shared culture (e.g. organizational cultures of the two firms forming a unique value system) is conceptually distinct from cultural change (e.g. organizational cultures of the two firms becoming increasingly the same). Organizational cultural crossvergence is also closely linked to new identity-building in M&A, which is defined as the creation of distinctive beliefs, values and norms characteristic of the new merged organization (Hogg & Terry, 2000).

Creation of a new shared culture can also be seen as an extension of the acculturation theory. If the assumption of domination is dropped in the theory of acculturation, the creation of a new shared culture can be considered as a fifth acculturation mode in addition to the ones identified by Nahavandi and Malekzadeh (1988) (integration, assimilation, deculturation, and separation). This fifth acculturation mode - creation of a new shared culture - measures the extent to which values and practices specific to the post-acquisition organization are created. Whereas cultural change can be one-sided, creation of a new shared culture requires changes in both acquiring and acquired firms. Building a new shared culture includes combining the best features of both firms’ cultures. It also requires removing the symbols of previous identities and replacing them with new symbols in both firms.

Van Knippenberg, Van Knippenberg, Monden, and de Lima (2002) suggest that the extent to which employees are willing and able to identify themselves with the post-merger organization can be considered a key factor in the success of mergers. Likewise, DeNisi and Shin (2005) propose that if employees develop favorable merger identities with the new organization during the period of merger implementation they will highly commit themselves to the merger implementation. Similarly, Vaara (1999) argues that building a new shared culture and identity can be a particularly effective way of integrating previously separate organizations. By building a new shared culture and identity, management can help define a new category where both firms are psychologically merged (Olie 1994). Angwin and Vaara (2005) suggest that building this new shared culture creates joint commitment, reduces potential conflicts, and creates value for the firm.

Empirical studies provide support for the positive impact of a new shared culture. Van Dick et al. (2006) reported that ensuring a sense of belonging and providing a basis for a new social identity is important for acquisition success. As an example, Björkman et al. (2005) found that in the Finnish-Swedish merger of MeritaNordbanken, the top managers viewed the focus on shared vision as a way to avoid cultural confrontation and organizational politics. In addition, Chua et al. (2005) discuss the importance of the
creation of a new culture and identity at Novartis while Vermeulen (2005) underlines the importance of blending\textsuperscript{40} at Aventis.

Yet, literature on organizational change processes disagrees concerning the extent to which culture can be “built” and the extent to which culture is “unmanageable”. Researchers taking a more realist view of culture would tend to agree that culture can be “built”. Yet, researchers who take a more constructionist view tend to argue that culture is emerging and unknown to all parties, which makes it inherently “unmanageable” (Säntti 2001). In addition, the results of the study of Carroll and Harrison (2002) suggest that the successfuless of cultural change processes may depend on demographics within the organization. Through simulations, Carroll and Harrison (2002) found that when the demographics of the acquiring and acquired firm show fluid movement of individuals into and out of the organization, cultural integration was achieved more quickly than if the two organizations showed stagnant demographics with little movement in and out. Carroll and Harrison (2002) argued that it is easier to recruit and socialize new individuals to the cultural ideals of the merged organization than it is to re-socialize and re-train people who are already accustomed to the ways of one of the acquisition partners.

Researchers who agree that culture, at least to some extent, can be built offer several ways to built new culture. Based on their empirical results, Bartels et al. (2006) suggest that, in order to obtain a strong identification with the new organization, managers should pay extra attention to current departments with weaker social bonds as those are expected to identify the least with the new organization. Seo and Hill (2005) propose other ways of building new culture, including highlighting a common out-group or competitor, using various cross-organizational structures and teams, introducing a new company name or logo, eliminating or consolidating brands, and consolidating corporate value statements (Seo & Hill 2005). Vermeulen (2005) suggests that people from both parties should identify best practices and agree on follow-up processes to ensure that the practices are actually put in place. He also suggests assigning people from both the acquiring and acquired firms to tasks and responsibilities for the new combined firm to prevent different viewpoints from being ignored (Vermeulen 2005). Schweiger and Goulet (2005) offer deep-level cultural learning interventions as solutions for building a new shared culture. Deep-level cultural learning involves open introspection by both firms to complement the mutual comparison of insights, knowledge, and experience between the combining firms (Schweiger & Goulet 2005). This supports shared understandings of how the new organization should work:

“Through deep-level cultural interventions, a mutual synthesis of the combined organization’s new identity will be created from the valued elements of each combining firm’s past.”
(Schweiger & Goulet 2005, Page 1483)

Moreover, Söderberg and Björkman (2003) stress the importance of changing concrete organizational practices. They argue that organizational cultures do not exist if they are not made sense of and discussed by those who should feel attached to and identify with them. Therefore, rather than focusing on abstract ideas and values, managerial efforts

\textsuperscript{40} Vermeulen (2005) defines blending as a process that allows companies to enrich each other and create new organizational practices. At Aventis, the strategy was to create a new company and not the sum of the two previous companies (Vermeulen 2005).
should be focused on aligning ideas, values and norms around concrete organizational practices. Reflections on perceived practical and cultural differences, concrete changes in practices and conscious cultural development should support each other. (Søderberg & Björkman 2003) In addition, in foreign acquisitions, the choice of the common corporate language is a central element in reconstructing a new corporate culture and balancing power between merging parties (Piekkari et al. 2005). Concerning informing and educating the personnel, Björkman et al. (2003) found that cultural training seminars were generally viewed as useful and interesting by the participants:

“It was seen as specifically important to acknowledge and openly discuss the historical and cultural background of the merger parties and to develop suggestions concerning how to further develop the organization. On a more critical note, some experienced the seminars to be somewhat detached from their daily work.” (Page 221)

Vaara et al. (2003b) describe that merging involves a need to re-construct one’s own identity in relation to the other party and a need to construct a common identity for the merged organization. Hofstede (1980) suggests that identification with a new organization requires time because it takes place through common experiences that only accumulate over time. Additionally, Nonaka and Takeuchi (1995) state that when new culture is built by combining the best features of both firms’ cultures, it requires cultural understanding – comprehending and accommodating divergent attitudes. Schill et al. (1994) point out that building a new shared culture also requires patience, flexibility of mind, and readiness to learn from the partner (Schill, Bertodo, & McArthur 1994). Finally, Young (2000) warns managers against choosing their own assumptions as “correct” underlying assumptions. Instead, managers should identify underlying assumptions that will promote the most successful organizational performance by maintaining them if they already exist, or moving the firm toward adopting them if they do not (Young 2000).

The creation of new shared culture is mostly discussed in connection with mergers (Björkman et al. 2005, Olie 2005, Vaara 1999). In Essay 3, I show that the creation of a new shared culture can be an effective cultural integration mechanism in acquisitions, too, as a way to bridge cultural differences and as a way to transfer knowledge in culturally distant acquisitions.

### 3.7. Proposed Theoretical Framework

The framework of this doctoral thesis combines the three types of cultural factors discussed in this chapter: cultural differences, acculturation factors, and cultural integration (see Figure 2). Cultural differences are examined at the level of national and organizational cultural differences. Acculturation factors include partner attractiveness, cultural preservation, and multiculturalism. Cultural integration comprises cultural change and creation of new shared culture. Essay 1 sets the stage for the following essays by comparing cultural differences and cultural integration – between domestic and international acquisitions.

In this thesis, the outcome of post-acquisition integration is considered a multi-dimensional construct: it includes outcomes related to efficiency theory (synergy), the knowledge-based view (knowledge transfer), and human resources/organizational
behavior (conflict). In Essays 2-5, the impact mechanisms of cultural factors (cultural differences, acculturation factors, cultural integration) are examined in relation to these post-acquisition outcomes.

The context of the framework is illustrated in Figure 3. Factors and relationships that are examined in this thesis are highlighted. The acquiring company and its culture are illustrated on the left while the acquired company and its culture are depicted on the right. Each firm is embedded in national and industry cultures. In addition, each firm has its own organizational culture that can further be divided into sub-cultures based on organizational functions or other classifications.

National and organizational cultural differences measure how different the national and organizational cultures are between the acquiring and the acquired firms. Based on previous research, they are expected to impact the outcome of the post-acquisition integration. Although the different impact mechanisms of cultural differences are explored throughout all essays included in this thesis, Essays 3, 4 and 5 are particularly interesting in this respect because they investigate more complex impact mechanisms of cultural difference and uncover moderating (Essay 3), mediating (Essay 4), and non-linear effects (Essay 5).

Furthermore, previous research suggests that the outcome of the post-acquisition integration depends on the acculturation factors. Acculturation factors and their role in explaining human-resource-outcomes in acquisitions are the particular focus of Essay 2. In addition, management of cultural integration plays an important role in acquisition value creation. Essay 3 concentrates on two process variables related to the management of cultural integration: cultural change and creation of a new, shared culture. The moderating role of cultural integration in relation to national cultural differences is also investigated.

Thus, the essays are closely linked to the overall theoretical framework of the thesis. The essays are also closely linked to each other while, at the same time, each essay has a different focus. Essay 1 is a general comparison of strategic and organizational factors (including cultural factors) between domestic and international acquisitions. This introduces the reader to two important aspects of acquisitions – strategic and organizational fit – and demonstrates how the fit is different in domestic and international acquisitions. Essays 2-5 go further into the cultural problematic by attempting to explain the relationship between cultural factors and post-acquisition integration outcomes. In Essay 2, the aim is to show the impact of acculturation factors in relation to cultural differences. Essay 3 focuses on cultural integration and highlights the importance of processual cultural factors (cultural change and creation of a new, shared culture). It also links cultural integration to cultural differences by exploring how cultural integration moderates the impact of national cultural differences. Essay 4 is increasingly complex and explores the impact of cultural differences on two opposing mechanisms in post-acquisition integration – knowledge transfer and conflict. Furthermore, Essay 4 shows how the impact of cultural differences is mediated by operational integration efforts. Finally, Essay 5 is an attempt to “look outside the box” by dropping the assumption of linearity assumed in Essays 1-4 and in most of the previous acquisitions research. In this way, each essay included in this thesis presents an
increasing level of complexity as the reader moves from relatively straightforward analyses in Essays 1-2 to more complex models in Essays 3-5.

**Figure 2** Framework for the thesis

- **Cultural differences (Essays 1-5)**
  - National culture differences
  - Organizational culture differences

- **Acculturation factors (Essay 2)**
  - Multiculturalism
  - Cultural preservation
  - Partner attractiveness

- **Cultural integration (Essay 1, 3)**
  - Cultural change
  - Creation of new shared culture

- **Outcome of post-acquisition integration**
  - Synergy (Essay 5)
  - Knowledge transfer (Essay 3, 4, 5)
  - Conflict (Essay 2, 4)
Figure 3  Illustration of the framework of the thesis
4 METHODS

In this chapter, I describe the empirical method of this thesis. First, I describe the data collection process; then, I discuss validity and reliability of the sample. Finally, I briefly present the statistical analysis methods used in this thesis: correlation analysis, multivariate analysis of covariance (MANCOVA), factor analysis, regression analysis, and structural equation modeling.

4.1. Data Collection Process

4.1.1. Survey Method

The methodological choice in this thesis is a quantitative survey method. There are several reasons for selecting this method. First, the quantitative survey approach follows from the post-positivist ontological and epistemological bases of this study. Second, quantitative surveys are needed to examine Finnish acquisitions. Case studies (Säntti 2001, Vaara 2002) and studies based on secondary data (Böckerman & Lehto 2004, Lehto, 2006) have been conducted in the Finnish context, however, there is a clear lack of large-scale studies that use primary data. Third, an important advantage of the quantitative survey method is that looking across many cases makes it possible to generalize results. The peculiarities of individual cases are averaged out and a picture of a phenomenon – Finnish acquisitions in particular, and acquisitions in general – unspecific to one case or a small group of cases, can be constructed (Cohen & Manion 1980).

From the basic methods available for data collection in surveys (telephone survey, personal interviews, and mail survey), the mail survey method was chosen because it has several benefits. First, it costs less than telephone or personal interviews. Second, it is possible to reach a large number of geographically diffused respondents. This was particularly important as foreign acquisition cases are geographically diffused. Third, key-decision makers with busy schedules are easier to reach through mailed questionnaires than through time-consuming interviews. Furthermore, mail survey increases the reliability of the study because there is no interviewer bias.

4.1.2. Data Collection Rounds

The study was carried out within a larger research project. The project was run first at the Department of International Business at Helsinki School of Economics, and then at the Department of Management and Organization at the Swedish School of Economics and Business Administration.

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41 In few cases, the survey was conducted by telephone if the respondent specifically requested it. In those cases, the researcher read aloud the questions and the answer scales and the respondent chose his answers accordingly. No additional explanations or information beyond the questionnaire was given in order to keep the information collected through the telephone comparable to the mail survey.
The data are based on three data collection rounds. The first postal survey was conducted in 1997, and targeted Finnish companies who had acquired companies either in Finland or abroad during the period 1993-1996. The second postal survey was conducted in 2001 and targeted Finnish companies who had acquired companies either in Finland or abroad during the period 1997-2000. The third postal survey took place in 2005 and targeted Finnish companies who had acquired companies either in Finland or abroad during the period 2001-2004. Data obtained through these three surveys was cross-sectional.

In each survey, data collection took place 1-4 years after the acquisition date. This time lag, after the acquisition, was chosen so as to allow for sufficient time to have passed since the acquisition in order to examine the integration process in a meaningful way (Haspeslagh & Jemison 1991), while at the same time not allowing too long a time to pass in order to avoid problems connected to retrospective sensemaking (Huber & Power 1985).

The data collection process was thorough and similar in all three data collection rounds. First, cover letters were sent to the CEOs of the acquiring companies to inform them about the research project. Then, the CEOs were contacted by telephone and asked to name key decision-makers from both the acquiring and acquired firms, ranging from 1 to 5 persons. This procedure allowed us to identify the right respondents in both the acquiring and acquired companies. Finally, the questionnaire was sent to the identified respondents or the survey was completed by a phone interview.

The data collection was carried out by six masters students in the first round, three master’s students in the second round (including myself), and two master’s and two doctoral students (including myself) in the third round.

42 It should be emphasized that we focused on ensuring that actual key-decision makers involved in acquisition integration responded to the questions rather than trying to maximize the number of responses. This resulted in a smaller sample than if we had been less discriminating with the respondents. Nevertheless, we believe that this approach resulted in a better quality of the data and represents the managerial view of post-acquisition integration.

43 The choice to include respondents from both the acquiring and the acquired firm was different from those implemented in most past research, where responses emanated from only one source: the top-managers from one of the two former companies. We tested whether the responses collected with our method differed according to the origin of the respondent. Although the relationships between cultural variables and different acquisition outcomes were similar across the two sub-samples (acquiring firm responses vs. acquired firm responses), acquiring firm respondents, in general, had a tendency to “overestimate” the “positive” results such as synergy realization, knowledge transfer, and cultural change while they tended to “underestimate” the “negative” aspects, such as organizational cultural differences, organizational problems, and conflict. Similarly, compared with acquiring firm respondents, the acquired firm respondents had a tendency to “underestimate” the “positive” aspects and to “overestimate” the negative aspects. These finding should be interpreted with caution: only some differences were statistically significant. In addition, the sample size of the acquired firm responses was rather small - much smaller than the respective sample of the acquiring firm responses - which limited the comparability of the samples and the analysis methods that could be used. However, the differences between acquiring and acquired firm responses could help to understand some contradictory findings in the past acquisition research.
4.1.3. **Sampling Criteria**

The sample companies were selected using secondary data provided by the Finnish financial magazine “Talouselämä”. Talouselämä magazine lists acquisitions in which a Finnish firm has been involved. The coverage of the data is very comprehensive. The following four criteria related to ownership and size were used in the selection of the acquisition cases. First, we wanted to examine the behavior of Finnish acquirers. Thus, the acquirer had to be of a Finnish origin, excluding acquisitions made by subsidiaries of foreign companies located in Finland. Second, we wanted to examine cases that involved a real post-acquisition integration process. Thus, management buy-outs and purely financial acquisitions were excluded. Third, we wanted to exclude joint ventures, minority ownerships, and mergers in order to concentrate on phenomena specific to acquisitions. Hence, we included only cases in which the acquiring party had gained a majority holding (> 50%) of the acquired firm. Fourth, to exclude very small acquisitions, the acquired company’s turnover had to exceed FIM 20 million (EUR 3.4 million).

4.1.4. **Questionnaire Design and Sample**

There are two basic methods of asking questions in questionnaires: open-ended questions and closed questions. In open-ended questions, the respondent is free to formulate his/her answers. The advantage of open-ended questions lies in this freedom. However, the disadvantage is that the researcher, while analyzing the data later, will be confronted with problems of systemization of the data. The advantage of closed questions is that they are faster to fill in and there is no data systemization problem. The disadvantage of closed questions is that they may leave out important details and are subject to misunderstandings.

In order to facilitate the data analysis and to make the questionnaire faster to fill-in, we decided to use only closed questions. The questionnaires were pretested, and possibly confusing questions were reformulated. A 7-point Osgood scale was chosen because it is widely used in attitudinal and perceptual research and allows for more variance than a 5-point Likert scale.

Minor modifications in the questionnaire were made between different rounds. For the most part, these modifications did not affect the questions that are used in this thesis. The only exception was related to questions about acculturation factors. In the first and second data round, questions related to acculturation factors resulted in low alpha values. Therefore, supplemental questions were added in the third survey round regarding multiculturalism, cultural preservation, and partner attractiveness. The alphas improved significantly. Therefore, the essay on acculturation factors (Essay 2) is based solely on data from the third round. Essay 1 is based on the first and second data collection rounds because it was written before the results of the third data collection round were available.

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44 The modifications are indicated in the research questionnaire in Appendix 1.
The first survey round resulted in a total number of 263 answers from 86 acquisitions. The second survey round resulted in a total number of 160 answers from 110 acquisitions. The third survey provided 118 additional answers from 100 acquisitions.

The response rates for the surveys were 55% in the first survey, 21.4% in the second survey, and 20.1% in the third survey. Although acceptable response rates can vary across countries, in general, a well-planned postal survey should obtain at least a 40 percent response rate (Cohen & Manion 1980). However, in acquisition research, one has to consider the sensitive nature of acquisitions which may restrict the willingness of managers to comment on acquisition outcomes. In a similar large-scale mail survey conducted in the US manufacturing industry, Datta (1991) achieved a response rate of 27%. A mail survey of Italian cross-border acquisitions had a response rate of close to 25% (Morosini et al. 1998) Compared with these studies, the response rate of the first survey can be considered excellent while the response rates of second and third surveys compare well with those obtained by similar international studies (Datta 1991, Morosini et al. 1998, Schoenberg 2004).

4.2. Validity and Reliability

In the following, I will discuss the validity and reliability of the data. Validity refers to whether or not the questions in the questionnaire measure what they are supposed to measure (Cohen & Manion 1980). Reliability measures the degree to which the measurements are “true” and “free of errors” (Afifi & Clark 1990).

4.2.1. Internal Validity

Internal validity is the extent to which results can be interpreted accurately (Skager & Weinberg 1971). During data-collection, we took several measures to improve the internal validity of the questionnaire. First, the time period for each research round was limited. Thus, concerning questions on pre-acquisition culture, managers had to reflect no further back than four years. This reduced a possible “hindsight” bias connected to people’s imperfect memory. Second, a group of professors and managers pre-tested the questionnaire and the necessary changes were made based on their feedback. Third, the questions were drawn and adapted from previous research and had thus been tested before. Standard management terminology was used. The same measurements and instruments were used for all research subjects. Fourth, we took several provisions to avoid pseudo-relationships between variables and to minimize common method effects. For example, to overcome priming and consistency effects (Pffeffer & Salancik 1977), questions regarding the dependent and independent variables as well as control variables were spread in the questionnaire. Other questions, not relevant to this thesis, were inserted between the questions used in this thesis. Fifth, in all models, we checked for common method bias by conducting Harman’s single-factor test. The basic assumption of this technique is that if a substantial amount of common method variance

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45 Retrospection is considered to be less problematic in acquisition research. Acquisitions have the affect of sharpening rather than dulling memory, as they represent circumstances of sudden change and disruption, which leads to very lasting memories (Sinetar 1981).
is present, either a single factor will emerge from the factor analysis or one general factor will account for over 50% of the variance (Podsakoff, MacKenzie, Lee, & Podsakoff 2003). The Harman’s single-factor test suggested that there was no serious common method bias in any of the models presented in this thesis. Finally, the explanatory power of the models was high, and the models showed many very significant dependencies. This suggests that we managed to capture the effect of many important cultural variables.

4.2.2. External Validity

*External validity* is defined as the extent to which the results can be generalized to populations and conditions (Cohen & Manion 1980). The response rates seem adequate to enable generalizations to the entire population of Finnish acquisitions. In addition, the results support general acquisition theories that stem from non-Finnish contexts, thus suggesting that the results are not specific only to Finland. The results are also stable regardless of the acquisition year, which further suggests that the results are not due to specific economic conditions.

We checked for potential non-response biases using the size of the acquired company and the time elapsed since the merger announcement, as these variables may influence managers’ emotions and objectivity (Dundas & Richardson 1982; Sales & Mirvis 1984). T-tests of mean differences were not significant, indicating that there was no non-response bias.

We deliberately anchored the sample in one country (Finland) in order to overcome the methodological problems associated with construct universality. In addition, following the advice of Venkatraman and Ramanujam (1986), we chose target respondents according to specific criteria based on position. All target respondents were high-ranking managers.

4.2.3. Construct Validity

*Construct validity* measures how accurately the variables reflect what they are intended to (Skager & Weinberg 1971). To improve construct validity, we developed multivariate measurements, also known as summated scales. In this technique, several variables are joined together in a composite measure to represent a concept using the sum, average, or factor loadings of the individual variables. The objective was to avoid the use of only a single variable to represent a concept. Instead, we used several variables as indicators, all representing differing facets of the concept (Afifi & Clark 1990). Multivariate measures do not place total reliance on a single response, but instead on the “average” or “typical” response to a set of related responses. Thus, multivariate measures reflect the “true” response more accurately than does a single response (Afifi & Clark 1990).

Factor loadings and Cronbach’s alpha values were calculated to check the internal consistency of the multivariate measures. Based on both factor loadings and Cronbach’s alpha values, the overall construct validity in this study is good.
4.2.4. Reliability

Reliability is the degree to which the observed variable is free of measurement error (Afifi & Clark 1990). Several precautions were taken to increase the reliability of the measures. First, the use of survey method has been found to improve general reliability because there is no interviewer bias (Cohen & Manion 1980). Second, following the advice of Venkatraman and Ramanujam (1986) and the example of several previous acquisition studies (Lubatkin et al. 1998, Lubatkin et al. 1999, Very et al. 1996, Weber 1996, Weber et al. 1996), we used multiple respondents to control for measurement error. Comparing the answers of multiple respondents in cases where we had more than 1 response per acquisition showed very high correlations (over 0.70). We also checked inter-rater reliability between the respondents with Kendall’s coefficient of correlation, which resulted in highly significant scores (p < 0.01). In cases where we had multiple responses, we used the average score of the respondents, which is an approach used in several previous acquisition studies (Lubatkin et al. 1998, Lubatkin et al. 1999, Very et al. 1996, Weber 1996, Weber et al. 1996). To test whether averaging the scores of multiple respondents impacted the results, each model was re-tested by using individual scores for each respondents. When compared, the averaged scores resulted in slightly lower correlations, which can be partly attributed to a decrease in sample size. The more conservative estimates based on averaged scores are presented in this study. Therefore, if averaging biased the results, it is a bias towards weakening, not strengthening the hypothesized relationships. Third, the answers to the survey questions were based on top managers’ subjective views. Top managers can be considered to have the best overall view of the acquisition process. Fourth, perceptional data provided fewer problems of external interpretation and aggregation than stock-market or accounting data (Venkatraman & Ramanujam 1986). Additionally, perceptional data provided a comprehensive measurement of acquisition outcomes, including human resources and behavioral outcomes (Venkatraman & Ramanujam 1986). Finally, if the same measure is asked about repeatedly, more reliable measures will show greater consistency than less reliable measures. The constructs used in this study showed a high level of consistency across all three study rounds and across multiple respondents, which supports the general reliability of the variables.

4.3. Analysis Methods

The analytical methods used in this thesis are based on multivariate data analysis. Broadly speaking, multivariate data analysis refers to all statistical methods that simultaneously analyze multiple measurements of each case under investigation (Hair, Anderson, Tatham, & Black 1998). The building block of multivariate analysis is the variate – a linear combination of variables with empirically determined weights (Hair et al. 1998). The variables, divided in independent and control variables, are specified by the researcher, whereas the weights are determined by the chosen multivariate

46 Essay 4 is an exception. Instead of using average scores, we adjusted the data by weighting each observation by the constant $1/\sqrt{n}$. Justifications for transformation are discussed in detail in Essay 4. However, in most essays the more traditional method based on averaging the scores of multiple respondents is used.

47 The limitations of perceptional data are discussed in the limitation section.
technique. Below, I give a brief overview of the multivariate data analysis methods used in this thesis.

4.3.1. **Correlation Analysis**

Initial screening of the correlation matrix is helpful in obtaining a preliminary impression of the interrelationships between the variables in the model. Afifi and Clark (1990) suggest first choosing a cut-off point for the magnitude of the correlation, for example, 0.3 or 0.4. Then, each correlation greater than the cut-off point is marked. The resulting pattern gives a visual impression of the underlying interrelationships as highlighted correlations indicate possible relationships (Afifi & Clark 1990). In this thesis, significant correlations are marked with star signs (*) in the correlation tables.

Additionally, correlation analysis helps to determine the existence of a problem called multicollinearity. *Multicollinearity* occurs when some of the independent and/or control variables are highly correlated (Hair et al. 1998). When multicollinearity is present, the computed estimates of the regression coefficients are unstable and their interpretation is unreliable (Afifi & Clark 1990). Afifi and Clark (1990) suggest that if the correlations between independent and/or control variables are greater than 0.95, only one of them should be used since one variable conveys essentially all of the information contained in the other (Afifi and Clark 1990). In this thesis, a correlation matrix and descriptive statistics (mean and standard deviation) are reported for each model.

4.3.2. **Multivariate Analysis of Covariance (MANCOVA)**

*Multivariate analysis of variance (MANOVA)* is used to simultaneously explore the relationship between several categorical independent variables and two or more dependent variables (Hair et al. 1998). *Multivariate analysis of covariance (MANCOVA)* can be used with MANOVA to remove the effect of any uncontrolled variables (known as covariates) on the dependent variables (Hair et al. 1998). Thus, MANCOVA allows comparisons between two or more groups along several dimensions while controlling for covariates. Essay 1 presents an example of the use of MANCOVA to compare two groups, domestic and foreign acquisitions, along several dimensions while controlling for service industry and time effects.

4.3.3. **Exploratory Factor Analysis**

In an *exploratory factor analysis*, uncorrelated factors which explain the largest variation in a set of variables are extracted (Metsämuuronen 2001). It is assumed that the correlation between two variables is due to their mutual relationships with common factors (Metsämuuronen 2001). Thus, with factor analysis, it is possible to discover different underlying dimensions amongst several variables. Factor analysis improves the construct validity. Instead of using single variables to represent a concept, factor analysis enables the use of several variables as indicators (Afifi & Clark 1990). Factor loadings show the relative importance of each variable within a factor.
The explanatory power of the model does not change if a rotation – a linear change – is done to the factors. The goal of rotation is to obtain a pattern of loadings that is easy to interpret. In Varimax rotation, a solution is considered easy to interpret when the factors are uncorrelated, and the variance of the loadings is as high as possible, i.e. there are as many loadings close to almost zero and almost plus/minus one as possible (Metsämuuronen 2001). Varimax is the most commonly used rotational criterion (Chatfield & Collins 1980). Varimax not only makes factors easier to interpret but also reduces multicollinearity if the factors are used in the subsequent regression or other multivariate analyses. An exploratory factor analysis with Varimax rotation is conducted in Essay 2 and in Essay 3.

4.3.4. Multiple Regression Analysis

Multiple regression analysis is a statistical technique that can be used to analyze the relationship between a single dependent and several independent variables. Regression analysis provides a means of objectively assessing the magnitude and direction, either positive or negative, of each independent variable’s relationship with the dependent variable (Hair et al. 1998).

The degree to which the regression equation fits the data can be assessed by examining the coefficient of determination,

\[
\text{coefficient of determination} = \frac{\text{sum of squares regression}}{\text{sum of squares total}}.
\]

The coefficient of determination is an indication of the reduction in the variance of the dependent variable that is achieved by using the independent variables as predictors. Numerically, the coefficient of determination is equal to the square of the multiple correlation coefficient, and therefore is called R Square. (Afifi & Clark 1990) The higher the R square, the better the explanatory power of the model. Regression analysis is used as the primary analysis method in Essays 2, 3, and 5.

4.3.5. Structural Equation Modeling (SEM)

While structural equation modeling (SEM) serves purposes similar to multiple regression analysis, it enables a simultaneous analysis of a series of dependence relationships and examination of several multiple dependent variables (Shook, Ketchen Hult, & Kacmar 2004). SEM consists of a set of linear equations that simultaneously test two or more relationships among directly observable or unmeasured latent variables (Shook et al. 2004).

SEM is characterized by two basic components: the structural model and the measurement model. The structural model is the path model, which relates independent variables to dependent variables (Hair et al. 1998). The structural model is built based on theoretical relationships between the variables. The measurement model allows the use of several variables (indicators) for independent or dependent variables. In the measurement model, the researcher can assess the contribution of each scale item as well as evaluate how well each scale measures the concept (Hair et al. 1998). The
measurement model is important in the establishment of the validity and reliability of the analysis. Only a few acquisition studies have been conducted by using the SEM technique, which offers an opportunity for a methodological contribution. In addition, it is possible to include mediating and moderating variables as demonstrated in the model that is put forward in Essay 4.
5 SUMMARIES OF ESSAYS

In the following, I will present brief summaries of the five essays included in this thesis. A general overview of the essays can be found in Appendix 1.

5.1. Essay 1: Exploring Differences in Strategic and Organizational Fit between Domestic and International Acquisitions

Based on previous research, it is not obvious that there exist any differences at all between domestic and international acquisitions. In fact, a group of previous studies has established that no differences existed in several key aspects such as synergy realization (Larsson & Finkelstein 1999), growth in sales (Lubatkin et al. 1998), performance index (Very et al. 1996), cumulative abnormal returns (Dewenter 1995), stock prices (Eddy & Seifert 1984), degree of acculturation (Larsson & Lubatkin 2001), and acculturative stress (Very et al. 1996). Other studies show evidence for differences, but fail to convince the reader of the direction of the differences. International acquisitions have been found to result in negative outcomes such as lower profitability (Bühner 1991), higher top management turnover (Krug & Hegarty 1997), and higher employee resistance (Larsson & Finkelstein 1999). At the same time, international acquisitions have also been found to produce positive outcomes in terms of higher cumulative abnormal returns (Bühner 1991, Swenson 1993), and higher average bid premiums (Harris & Ravenscraft 1991) compared with domestic acquisitions.

In the first essay of this thesis, I suggest that in order to explain the large variance in the results of the previous acquisition studies, one should explore systematically how two important determinants of acquisition outcomes – strategic and organizational fit – differ across domestic and foreign acquisitions. I argue that we have to understand the key differences in order to apply general acquisition theories in foreign contexts. Furthermore, understanding the differences between domestic and international acquisitions helps managers to more successfully conduct international acquisitions or both international and domestic ones. The theoretical framework for this essay is illustrated in Figure 4.

The findings suggest that significant differences exist in both strategic and organizational fit. International acquisitions are characterized by lower strategic fit in terms of lower synergy realization and lower knowledge transfer. In similar vein, international acquisitions show a lower level of organizational fit in terms of higher cultural differences and a lower level of creation of a new shared culture. By clarifying the aspects along which domestic and international acquisitions differ, the study contributes to research in international management.

48 This essay is based on the following article: Sarala, R.: “Exploring Differences in Strategic and Organizational Fit between Domestic and Foreign Acquisitions.”
Figure 4   Framework for Essay 1
5.2. Essay 2: The Impact of Cultural Differences and Acculturation Factors on Post-Acquisition Conflict\textsuperscript{49}

Previous theoretical and qualitative research underlines the importance of cultural aspects in explaining human-resource-related post-acquisition problems. Nevertheless, this recognition has translated itself into surprisingly little quantitative empirical research. Quantitative studies within the cultural perspective have tended to link cultural factors directly to acquisition performance without testing the role that they play in determining human-resource-related outcomes. Therefore, this paper quantitatively examines the impact of cultural aspects on post-acquisition conflict, which is an important human-resource-related outcome in acquisitions.

The main argument in the second essay is that post-acquisition conflict can be explained by cultural differences (at the national and organizational cultural levels) and acculturation factors (multiculturalism, organizational cultural preservation, and partner attractiveness). Although theoretically plausible, acculturation factors have been included only in a small number of quantitative acquisition studies and, specifically, the relationship between acculturation factors and post-acquisition conflict has not been empirically tested in many previous quantitative studies. Nevertheless, improving our understanding of the human aspects in acquisitions can enable a better understanding of the success and failure in acquisitions than is currently available (Bijlsma-Frankema 2001). The theoretical framework for the paper is depicted in Figure 5.

This study has three main contributions. First, it demonstrates the limited explanatory power of cultural differences and stresses the importance of acculturation factors. For researchers, this implies that attention should shift away from examining the effects of cultural differences to testing frameworks that include acculturation factors. The inclusion or exclusion of acculturation factors may explain the inconsistent results concerning cultural differences in previous studies. Second, this study shows the importance of recognizing the multi-level nature of culture. I included cultural difference both at the national and organizational level, but only organizational cultural differences were related to conflict. Finally, it is important to consider acculturation factors on the side of both the acquiring and the acquired firm.

\textsuperscript{49} This essay is based on the following article: Sarala, R.: “The Impact of Cultural Differences and Acculturation Factors on Post-Acquisition Conflict”.
Independent variables are highlighted with gray.

Figure 5  Framework for Essay 2
5.3. Essay 3: Cultural Differences, Cultural Change, and New Culture as Explanations of Knowledge Transfer in Post-Acquisition Integration

Despite an increase in studies taking a cultural perspective on mergers and acquisitions, we still lack an understanding of the role that cultural differences and cultural process variables play in acquisition value creation. The results concerning cultural differences have been inconsistent while only a few studies have focused on cultural integration processes in post-acquisition integration. Nevertheless, understanding the impact mechanisms of cultural differences and cultural process variables is essential if we want to better depict how cultural factors are linked with value creation in acquisitions.

Therefore, the third essay of the thesis includes a new kind of framework where both structural (national and organizational cultural differences) and processual cultural variables (cultural change and creation of new culture) are distinguished. We argue that particularly processual variables related to cultural integration - cultural change and creation of new culture - are important facilitators of value creation in acquisitions through their positive impact on knowledge transfer. The theoretical framework for this paper is illustrated in Figure 6.

The results show that adding the process variables related to cultural integration significantly enhances the explanatory power of cultural models and clarifies the role that cultural differences play in determining the level of knowledge transfer in acquisitions. National cultural differences, cultural change and creation of a new shared culture strongly contribute to knowledge transfer. Furthermore, we show that cultural change and creation of a new, shared culture moderate the impact of national cultural differences by strengthening the positive impact of national cultural differences on knowledge transfer. Therefore, this essay contributes to cultural perspective on acquisitions by providing empirical evidence for the importance of processual cultural variables and by showing their moderating effect on national cultural differences.

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50 This essay is based on the following article: Sarala, R. & Vaara, E.: “Cultural Differences, Cultural Change, and New Culture as Explanations of Knowledge Transfer in Post-Acquisition Integration.”
Independent variables are highlighted with gray.

**Figure 6  Framework for Essay 3**
5.4. Essay 4: The Impact of National and Organizational Cultural Differences on Social Conflict and Knowledge Transfer in International Acquisitions: A Causal Model and an Empirical Test

The starting point in this fourth essay of the thesis is that most existing analyses have treated the post-acquisition integration process as a “black box” without distinguishing the processes and mechanisms through which cultural differences affect post-acquisition processes (see also King et al. 2004, Shimizu et al. 2004). This has resulted in contradictory views and mixed empirical findings in previous research. Clarifying such impact mechanisms is, however, needed if we want to better understand the complex and potentially contradictory effects of cultural differences on post-acquisition integration dynamics.

In this paper, we propose specific mechanisms through which national and organizational cultural differences impact post-acquisition dynamics. First, we propose that national and organizational cultural differences increase social conflict and thus have a negative impact on post-acquisition processes. Second, we argue that, at the same time, cultural differences constitute potential complementary resources that can be exploited through knowledge transfer between the acquiring and acquired organizations. We further propose that social conflict has a negative impact on knowledge transfer and that the mechanisms through which cultural differences affect acquisition dynamics are influenced by the integration approach taken. The framework for the paper is depicted in Figure 7.

The structural equation model shows that while organizational cultural differences increase social conflict, national cultural differences decrease social conflict. As hypothesized, both national and organizational cultural differences have a positive effect on knowledge transfer. Additionally, social conflict has a negative impact on knowledge transfer. We contribute to research on post-acquisition integration by developing and empirically testing the dual processes through which national and organizational cultural differences impact integration dynamics in international acquisitions.

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51 This essay is based on the following article:
Figure 7  Framework for Essay 4
5.5. Essay 5: On the Impact of National Cultural Differences on Post-Acquisition Performance.\textsuperscript{52}

In the final essay of the thesis a novel approach is presented for reconciling the mixed results of previous studies concerning the impact of national cultural differences on the outcome of acquisitions. We argue that the relationship between national cultural differences and post-acquisition outcomes is more complex than previously assumed. In view of the mixed research findings and the multiple causal mechanisms at play, we expect to see non-linear effects when moving from domestic to culturally distant international acquisitions. We concentrate on two performance aspects that have been considered important in previous acquisition literature: synergy realization and knowledge transfer (see Figure 8).

Our regression analyses provide evidence that the relationship between national cultural distance and performance is better represented with a curvilinear (U-curve) relationship than with a linear one when performance is measured as synergy realization or knowledge transfer. While this analysis cannot empirically single out specific causes for this observation, we believe that it is due both the fact that culturally distant acquisitions provide specific opportunities for complementary synergies and knowledge transfer (Larsson & Finkelstein 1999, Morosini et al. 1998) and to the effects of “cultural myopia” (Harzing 2004, Vaara 2000).

An important message in this essay is that we should not fall prey to the simplest kinds of assumptions concerning linear relationships when dealing with multiple and partly contradictory causal mechanisms at play. Furthermore, our analysis shows that one should pay specific attention to cultural differences in settings of apparent cultural proximity. To the best of our knowledge, this is the first study that hypothesizes and reports a curvilinear relationship between national cultural distance and post-acquisition performance. This discovery is important because it opens up a new way of thinking for researchers and practitioners within the cultural perspective on acquisitions.

\textsuperscript{52} This essay is based on the following joint article:
The independent variable is highlighted with gray.

**Figure 8 Framework for Essay 5**
6 DISCUSSION

6.1 Main Findings

The overall aim of the thesis was to map out and illustrate the impact mechanisms of cultural factors in post-acquisition integration in order to explain the cultural aspects of acquisitions. I statistically modeled and tested hypotheses related to acculturation and cultural integration in order to quantitatively show their importance in acquisitions. In addition, through thorough quantitative analyses, I set out to uncover impact mechanisms that would explain contradictory results related to cultural differences in previous quantitative studies. Accordingly, the research questions in this study were formulated as follows:

- How do domestic and international acquisitions differ regarding strategic and organizational aspects (including culture)?
- How do acculturation factors – such as multiculturalism, cultural preservation, and partner attractiveness – impact post-acquisition integration?
- How does cultural integration – including cultural change and building new shared culture – impact post-acquisition integration?
- How do cultural differences impact post-acquisition integration at national and organizational cultural levels?

The main findings related to each research question are discussed in the following.

6.1.1 Differences between Domestic and International Acquisitions53

Previous studies examining differences between domestic and international acquisition have resulted in fragmented and inconclusive findings. To systematically explore how domestic and international acquisitions differ across strategic and organizational aspects, I concentrated on two important determinants of acquisition outcomes: strategic and organizational fit (see Table 4).

I found that clear differences existed in both strategic and organizational aspects. Strategic fit, when measured as synergy realization or knowledge transfer, was lower in international acquisitions than in domestic ones. This may be due to the difficulties in coordination and control due to geographical distance, and financial and legal barriers related to international acquisitions (Mirvis & Marks 1992). The findings related to synergy realization are connected to the study of Larsson and Finkelstein (1999) who found international acquisitions to be related to higher synergy potential. My results suggest that, in terms of synergy realization, international acquisitions fail to fully realize this potential. Overall, the findings related to strategic fit imply that international acquisitions result in a lower level of synergy realization and knowledge transfer but the difference is larger when we look at synergy realization.

53 This aspect is the focus of Essay 1.
Significant findings highlighted with grey

Table 4  Comparison of strategic and cultural factors in domestic and international acquisitions

Second, I established that the level of organizational fit was lower in international acquisitions when measured as a higher level of prior organizational cultural differences and a lower level of creation of a new shared culture. This is in line with the argument that international acquisitions contribute to organizational cultural differences (Hofstede 1980, House et al. 2004) and result in negative sociocultural acquisition outcomes (Krug & Hegarty 1997, Larsson & Finkelstein 1999). This finding suggests that international acquisitions do not only differ regarding strategic aspects, such as synergy realization, but they also differ across more organizational aspects. In particular, the finding of a lower level of building a new shared culture in international acquisitions points to the difficulties in successfully managing cultural integration in international deals.

Finally, I found no difference in the level of organizational cultural change. By combining the findings of higher levels of initial cultural differences in international acquisitions, no differences in cultural change, and a lower level of building a new shared culture, it can be concluded that international acquisitions remained more culturally separate than domestic ones. This is in line with the finding of a lower level of synergy realization and knowledge transfer in international acquisitions. Thus, overall, the results suggest that, in international acquisitions, the two firms remain more strategically and organizationally separate than in domestic ones. One possible explanation is that many foreign acquisitions may be domain exploration acquisitions.

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54 Domain exploration refers to acquisitions into new businesses that require new knowledge bases (Haseslagh & Jemison 1991). Haspeslagh and Jemison (1991) suggest that domain-exploring acquisitions require the ability to manage a preservation process through the use of an integration approach that gives the acquired firm more autonomy.
which require preserving the knowledge of the acquired firm and intentionally result in a lower level of integration. Another possible explanation is that national and organizational cultural differences and decreased cultural integration make it difficult to achieve a higher level of integration in international acquisitions even if it was desirable from a strategic point of view.

6.1.2. The Impact of Acculturation Factors

The focus on cultural differences has lead researchers to conduct little quantitative research on other cultural factors. To address the need to look beyond cultural differences, I examined the following acculturation factors derived from the acculturation theory (Berry 1980, Nahavandi & Malekzadeh 1988): multiculturalism, organizational cultural preservation, and attractiveness of the partner.

I explored the effect of acculturation factors on the level of post-acquisition conflict for two main reasons. First, in theoretical papers and case studies acculturation factors have been linked to negative human resource outcomes (Elsass & Veiga 1994, Marks & Mirvis 1986). Second, post-acquisition conflict is important in determining other types of post-acquisition outcomes, such as acquisition performance (Very et al. 1996) and synergy realization (Larsson & Finkelstein 1999).

I found strong empirical evidence for the importance of acculturation factors in explaining the level of post-acquisition conflict (see Table 5). First, partner attractiveness significantly reduced the level of post-acquisition conflict. This result is in line with the findings of previous studies concerning the positive impacts of attractiveness of the acquirer (Olie 1994, Very et al. 1996, Very et al. 1997). Previous research has concentrated on the attractiveness of the acquirer as perceived by the acquired firm. This thesis extends previous findings by showing the importance of mutual partner attractiveness.

The second acculturation factor that received support in this study was organizational cultural preservation. Theoretical studies have concentrated on the cultural preservation tendencies particularly on the side of the acquired company. However, the findings of this thesis suggest that cultural preservation tendencies on the side of the acquiring company have an even greater negative impact. Previous studies offer some possible explanations for the negative effect of cultural preservation on the side of the acquiring firm. If the acquirer insists on preserving its own culture, it negatively affects the building of a new shared organizational culture (Larsson & Lubatkin 2001, Siehl & Martin 1981) and increases the likelihood of condescending attitudes towards the partner (Marks & Mirvis 2001). Furthermore, cultural preservation on the acquiring firm’s side may lead to excessive domination of the acquirer, which is likely to lead to negative post-acquisition outcomes (Chatterjee et al. 1992).

The third acculturation factor examined – multiculturalism – was not related to the level of post-acquisition conflict. This was surprising because the theoretical argument for this relationship is presented in several studies – especially concerning the

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55 Essay 2 concentrates on acculturation factors.
multiculturalism of the acquirer (Chatterjee et al. 1992, Datta & Grant 1990, Nahavandi & Malekzadeh, 1988). However, no empirical support was found for this acculturation factor.

In conclusion, this study shows that acculturation theory is a powerful theoretical perspective when human resource implications of acquisitions are explored. In particular, the results suggest that cultural preservation tendencies in both firms as well as mutual partner attractiveness are critical determinants of the level of conflict. These findings indicate that future quantitative acquisition studies should better account for acculturation factors.

<table>
<thead>
<tr>
<th>Acculturation Factor</th>
<th>Outcome Variable</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiculturalism of acquirer</td>
<td>Conflict</td>
<td>Ns</td>
</tr>
<tr>
<td>Multiculturalism of acquired</td>
<td>Conflict</td>
<td>Ns</td>
</tr>
<tr>
<td>Cultural preservation by acquirer</td>
<td>Conflict</td>
<td>+</td>
</tr>
<tr>
<td>Cultural preservation by acquired</td>
<td>Conflict</td>
<td>+</td>
</tr>
<tr>
<td>Partner attractiveness</td>
<td>Conflict</td>
<td>–</td>
</tr>
</tbody>
</table>

Positive effect, (-) = Negative effect, (Ns) = Non-significant effect

Significant findings highlighted

**Table 5**  The relationships between acculturation factors and post-acquisition conflict

6.1.3. **The Impact of Cultural Integration**

Traditionally, studies on cultural differences have taken a very static perspective on post-acquisition integration. In order to take a more dynamic approach, I addressed the importance of integration process factors. I concentrated on cultural integration because acquisition researchers have argued that cultural integration is the most complex and most important level of integration (Shrivastava 1986). Cultural integration was conceptualized as “cultural change” and “creation of a new shared culture”. The impact of cultural integration was explored in relation to knowledge transfer (see Table 6).

A strong positive relationship was found between cultural change and knowledge transfer. Thus, this study shows that it is fruitful to look beyond cultural differences by distinguishing the extent of cultural change as measured by changes in perceptions of

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56 Essay 3 focuses on cultural integration.
cultural differences. In fact, cultural change was a stronger explanatory variable than national or organizational cultural differences. This finding suggests that it is the amount of change that matters, not the prior cultural differences as such. Whereas several theoretical and qualitative studies have pointed to the importance of cultural change (Jöns et al. 2007, Sales & Mirvis 1984, Styhre et al. 2006, Teerikangas & Very 2006) and quantitative studies have touched upon the issue of cultural change as an element in acquisition value creation (Larsson & Finkelstein 1999), this study provides clear quantitative empirical evidence of the importance of cultural change in realizing knowledge transfer during post-acquisition integration.

In addition, some evidence was found regarding the positive influence of another process variable: creation of a new, shared culture. While prior theoretical and case studies have pointed to the importance of this mechanism in mergers (see Buono & Bowditch 1989, Chua et al. 2005, DeNisi & Shin 2005, Olie 1994, Vaara 1999, Vermeulen 2005), it has not been given attention in quantitative acquisition studies. This study shows that creation of a new, shared culture facilitates knowledge transfer. We suggest that the new, shared culture functions as a coordination and control mechanism generating commitment between the acquiring and the acquired firm (Larsson & Lubatkin 2001, Siehl & Martin 1981) and providing a stronger sense of identity for organizational members (Deal & Kennedy 1982).

Furthermore, the results suggested that the increased potential for knowledge transfer in national culturally distant acquisitions, which has been implied in previous studies (Larsson & Finkelstein 1991, Morosini et al., 1998), was realized through cultural change and creation of a new shared culture. In other words, the positive impact of both

<table>
<thead>
<tr>
<th>Integration Process Factor</th>
<th>Outcome Variable</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural change</td>
<td>Knowledge transfer</td>
<td>+</td>
</tr>
<tr>
<td>Creation of a new shared culture</td>
<td>Knowledge transfer</td>
<td>+</td>
</tr>
<tr>
<td>Cultural change x national cultural differences</td>
<td>Knowledge transfer</td>
<td>+</td>
</tr>
<tr>
<td>Creation of a new shared culture x national cultural differences</td>
<td>Knowledge transfer</td>
<td>+</td>
</tr>
</tbody>
</table>

(+) = Positive effect

Table 6  The relationships between dynamic process factors and knowledge transfer

In addition, some evidence was found regarding the positive influence of another process variable: creation of a new, shared culture. While prior theoretical and case studies have pointed to the importance of this mechanism in mergers (see Buono & Bowditch 1989, Chua et al. 2005, DeNisi & Shin 2005, Olie 1994, Vaara 1999, Vermeulen 2005), it has not been given attention in quantitative acquisition studies. This study shows that creation of a new, shared culture facilitates knowledge transfer. We suggest that the new, shared culture functions as a coordination and control mechanism generating commitment between the acquiring and the acquired firm (Larsson & Lubatkin 2001, Siehl & Martin 1981) and providing a stronger sense of identity for organizational members (Deal & Kennedy 1982).

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cultural change and creation of a new shared culture was amplified in acquisitions that were distant on the national cultural differences scale. This suggested that cultural process variables were particularly influential facilitators for knowledge transfer in culturally distant acquisitions. Thus, the impact of national cultural differences was moderated by factors related to the management of the integration process – cultural change and creation of a new shared culture.

6.1.4. The Impact Mechanisms of Cultural Differences

Two recent literature reviews demonstrate the inconsistent and inconclusive results concerning the impact of cultural differences (Stahl & Voigt 2005, Teerikangas & Very 2006). Although case studies have included both national and organizational cultural levels (Olie 1990, 1994, Säntti 2001, Nummela 2005), only a few quantitative studies simultaneously explore both levels of culture (Very et al. 1996, Very et al. 1997, Weber et al. 1996). The inclusion of both national and organizational cultural levels has been suggested in order to statistically model the cultural complexities in acquisitions and to separate the effects of organizational and national cultures (Teerikangas & Very 2006, Weber et al. 1996). To address these concerns, the level of the quantitative analysis in this thesis was at both national and organizational cultural level.

The mechanisms through which cultural differences impact post-acquisition performance remain, to a large extent, unknown (Teerikangas & Very 2006). In order to better understand the different impact mechanisms of cultural differences, I explored the impact of cultural differences on several post-acquisition outcomes. The following post-acquisition outcomes were drawn from previous research: synergy from efficiency theory, knowledge transfer from the resource and knowledge-based view, and conflict from human resource and organizational behavior literature. In addition to direct linear effects, I also explored non-linear, mediated, and moderated effects of national cultural differences. The results concerning cultural differences on these outcome variables are summarized in Table 7.

Taken together, the results suggested that the impact mechanisms of cultural differences are much more complex than has been acknowledged in previous research. First, cultural differences have both positive and negative effects, depending on which aspect of post-acquisition outcome and which level of cultural differences is explored. On one hand, the positive effect of cultural differences flows through knowledge transfer and is related to both national and organizational cultural levels. Also, national cultural differences have a positive effect through their tendency to decrease conflict. On the other hand, the negative effect of cultural differences is related to the tendency of organizational cultural differences to increase conflict. The total effect of cultural differences is the balance of these opposing forces. If the strength of positive and

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58 Different impact mechanisms of cultural differences are explored throughout Essays 1-5. However, Essays 4 and 5 explicitly focus on uncovering more complex impact mechanism.

59 This effect was found in foreign acquisitions using data from data collection rounds 1-3, as reported in Essay 4. However, the effect was not found in Essay 2, in which a different, smaller data set was used (data collection round 3 and including both domestic and foreign acquisitions).

60 This finding was verified in both Essay 2 and Essay 4.
negative effects varies from one acquisition or from one country to another, some of the variance in the results of earlier studies can thus be explained.

Table 7  The relationships between cultural differences and different post-acquisition outcomes

<table>
<thead>
<tr>
<th>Level of Cultural Differences</th>
<th>Outcome Variable</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>National cultural differences</td>
<td>Synergy</td>
<td>U-curve (Essay 5: domestic and foreign acquisitions)</td>
</tr>
<tr>
<td>National cultural differences</td>
<td>Knowledge transfer</td>
<td>+ (Essay 3 and Essay 4: foreign acquisitions) or U-curve (Essay 5: domestic and foreign acquisitions)</td>
</tr>
<tr>
<td>National cultural differences</td>
<td>Conflict</td>
<td>- (Essay 4: foreign acquisitions) or Non-significant (Essay 2: domestic and foreign acquisitions)</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>Synergy</td>
<td>Non-significant$^{61}$</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>Knowledge transfer</td>
<td>+ (Essay 4 and Essay 5) or Non-significant if cultural process factors are controlled for (Essay 3)</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>Conflict</td>
<td>+ (Essay 2, Essay 4)</td>
</tr>
</tbody>
</table>

(+) = Positive effect, (-) = Negative effect, significant findings are highlighted

$^{61}$ The relationship between organizational cultural differences and synergy is controlled for in Essay 5.
Second, previous research has assumed strictly linear impact mechanisms of cultural differences, but if the assumption of linearity is dropped, the impact of national cultural differences on synergy and knowledge transfer follows a U-curve. Third, this study suggests that previous empirical studies may have resulted in incomplete and unstable models due to lack of controlling for important cultural variables, such as multiple levels of culture, acculturation factors, and dynamic cultural factors. Disregard of these cultural factors may have lead to the overemphasis of the impact of cultural differences, particularly at the organizational cultural level. Initial organizational cultural differences may be less important than the subsequent processes to bridge these differences.

Finally, the impact of cultural differences is mediated and moderated by other variables. In this thesis, I included three variables – operational integration, cultural change, and creation of a new, shared culture – that mediated or moderated the effect of national cultural differences.

6.2. Contribution

The overarching theoretical contribution of this thesis lies in expanding the understanding of the impact mechanisms of cultural factors on the outcome of post-acquisition integration. More specifically, this study addresses three research gaps in the cultural perspective in acquisitions. First, this study shows how domestic and international acquisitions differ across several strategic and organizational dimensions. Literature on international acquisition often explicitly or implicitly assumes that differences between domestic and international acquisitions are due to cultural factors. This study shows that differences can indeed be found in cultural factors such as organizational cultural differences, but differences also exist in strategic factors such as synergy realization and knowledge transfer. These types of systematic comparisons are important for two reasons. First, to evaluate the extent to which differences between domestic and international acquisitions can be attributed to cultural factors, and second, to estimate the extent to which domestic acquisition theories are applicable to international contexts.

Second, this study contributes to acquisition literature by exploring beyond cultural differences. Although acculturation factors are explored in theoretical and qualitative acquisition literature, the quantitative work on acculturation factors in acquisition context remains scarce. I show that including acculturation factors in the post-acquisition analysis provides a more comprehensive picture of the post-acquisition integration process than a blind focus on cultural differences. By including both cultural differences and acculturation factors in the analysis, it is possible to compare the relative strength of each. The importance of acculturation factors is demonstrated by the finding that partner attractiveness alone offsets the negative impact of organizational cultural differences. I extend previous literature by showing the importance of mutual partner attractiveness. This provides a more comprehensive picture of partner attractiveness in acquisitions than concentrating only on acquiring or acquired company

62 In Essay 5, I suggest several theoretical explanations for the U-shape.
63 The mediating effect of operational integration is examined in Essay 4.
64 An examination of the moderating effects of cultural change and creation of a new, shared culture are included in Essay 3.
perceptions of attractiveness. In addition, this study contributes to acquisition literature by encouraging researchers to look beyond cultural differences and traditional acculturation factors and to focus on cultural process factors. I conceptualize cultural change and creation of a new, shared culture as two ways of achieving cultural integration in acquisitions. Both emerge as very strong explanatory variables of knowledge transfer. Adding these process factors also clarifies the role of organizational and national cultural differences in post-acquisition processes.

As a final point, this study sheds light on the controversy surrounding the impact of cultural differences. By examining several post-acquisition outcomes (synergy, knowledge transfer, and conflict), I uncover different mechanisms through which cultural differences impact post-acquisition integration. By including both national and cultural differences, I establish the relative importance of national and organizational cultural differences, which further clarifies how the impact mechanisms vary according to the level of culture. By including mediating and moderating variables and non-linear relationships I move beyond the assumption of direct effects and linearity that has explicitly or implicitly been made in many previous acquisition studies. The different mechanisms through which cultural differences influence post-acquisition integration help to explain some of the contradictions in previous research.

6.3. Delimitations and Suggestions for Further Research

This study has some general limitations. First, I relied on subjective acquisition outcome measures based on managerial perceptions. It is my belief that these perceptions are important. Managers make decisions based on their perceptions of the firm and its environment. In addition, “objective” data is not always as objective as it may seem at the first glance, due to, for example, different accounting methods. In future studies, researchers are encouraged to use both objective and subjective measures for acquisition performance. In a small country, such as Finland, this is challenging. Objective data is available only for public firms, which reduces the acquisition population significantly. Gaining a sufficient sample size for statistical analysis becomes increasingly difficult when the population decreases. A multi-country sample could be a solution to this problem.

Second, this study relied on retrospective evaluations of organizational cultural differences and acculturation factors. This could have resulted in hindsight bias. Ideally, one should be able to measure the cultural differences and acculturation factors when the acquisition takes place but getting access to the upper-level management in the middle of the acquisition deal is extremely difficult due to their time constraints and general secrecy surrounding these deals. Previous studies show consistent results concerning pre- and post-merger evaluations (Bartels et al. 2006, Van Dick et al. 2006), which suggests the absence of considerable hindsight bias in retrospective data collection in the acquisition context. Acquisitions sharpen rather than dull memories as they represent circumstances of sudden change and disruption, which leads to the production of lasting memories (Sinetar 1981).

Third, the results are based on three data collection rounds of cross-sectional data. Thus, the causality between the variables has to be theoretically argued. A longitudinal design
in future studies would help to confirm the causality of the relationships established in this study. A longitudinal design would also give the most accurate information on processual variables such as cultural change. However, combining a longitudinal survey design with a large scale survey design is impractical. Cartwright and Schoenberg (2006) argue that longitudinal studies are still uncommon in acquisition research because of the difficulty in maintaining representative sample sizes over time. Therefore, researchers may have to limit themselves to secondary data or choose only a limited number of companies that they can follow closely in order to obtain truly longitudinal data.65

Furthermore, this thesis explored two dynamic process factors related to cultural factors – cultural change and creation of a new, shared culture. My goal was to statistically show that process factors are important. Future studies should analyze process factors in more detail and statistically show, for example, which mechanisms are most effective in encouraging cultural change and the creation of a new, shared culture. Previous qualitative studies offer a basis for this. In addition, there is a limit associated with the investigation of acculturation variables in the context of a cross-sectional method of data collection. For instance, the level of partner attractiveness is likely to vary over time during the integration process. The use of longitudinal data would further strengthen the results and clarify the exact nature of the acculturation processes in post-acquisition integration. Furthermore, it is likely that there are other important process variables, related and unrelated to culture, that deserve examination in future studies. Future studies should concentrate on uncovering and empirically testing these variables.

**6.4. Managerial Implications**

In addition to increasing the theoretical understanding of the cultural aspects of the post-acquisition process, this study is of clear managerial relevance. It offers three clear and important implications for managerial practice. First, possible problems in integrating very different cultures should be contemplated as early as at the pre-acquisition stage. Although culturally distant acquisitions are not “doomed” to fail, management needs to understand the cultural complexities involved, which will require skillful conflict management and cultural sensitivity.

Second, at the pre-acquisition stage, management should also try to evaluate the level of attraction between the partners, as well as possible tendencies for cultural preservation. In particular, one should prepare for more organizational resistance and cooperation problems in hostile takeovers and in acquisitions where cultural preservation tendencies are high. These cultural evaluations should complement the financial pre-acquisition evaluations in order to assess the potential of the acquisition.

Third, this study points to the importance of cultural integration in terms of cultural change and creation of a new, shared culture. In previous studies, creation of a new, shared culture has been discussed in relation to mergers. This thesis suggests that it is a

65 Examples of this approach are the longitudinal study of Kavanagh and Ashkanasy (2006) that examines three mergers over a seven-year period and an eight-year ethnographic study of Yu et al. (2005) that focuses on one healthcare merger. However, in such small samples the benefits of large-scale quantitative studies cannot be achieved.
powerful integration mechanism in acquisitions as well. Although the extent to which cultural change and a new, shared culture can be “created” by managers is a debate in itself in cultural studies, this study clearly implies that managers should be aware of the positive impact of these cultural processes and make every possible attempt to create an atmosphere that encourages cultural change and the creation of a new, shared culture.
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   l_Advisory

**Newspaper and Magazine Articles**


APPENDICES
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<th>Title of the Article</th>
<th>Research Question</th>
<th>Analysis</th>
<th>Data set</th>
<th>Dependent* and Independent Variables</th>
<th>Main Results</th>
</tr>
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<tbody>
<tr>
<td>1. Exploring differences in strategic and organizational fit between domestic and international acquisitions.</td>
<td>How do domestic and international acquisitions differ across strategic and organizational aspects?</td>
<td>Mancova analysis</td>
<td>-Domestic and international acquisitions</td>
<td>-Strategic fit -Organizational fit -Domestic / international acquisition</td>
<td>-Both strategic and organizational fit is lower in international acquisitions.</td>
</tr>
<tr>
<td>3. Cultural differences, cultural change, and new culture as explanations of knowledge transfer in post-acquisition integration.</td>
<td>How do cultural differences and processual cultural factors impact knowledge transfer during post-acquisition integration?</td>
<td>Hierarchical regression analysis</td>
<td>-Foreign acquisitions -Data collection rounds 1-3</td>
<td>-Knowledge transfer -National cultural differences -Organizational cultural differences -Cultural change -Creation of new culture -Cultural change x national cultural differences -Creation of new culture x national cultural differences</td>
<td>-National cultural differences, cultural change and creation of new culture increase knowledge transfer. -The effect of national cultural differences is moderated by cultural change and creation of new culture.</td>
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<tr>
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APPENDIX 2 ESSAYS
Essay 1: Exploring Differences in Strategic and Organizational Fit between Domestic and International Acquisitions

The increasing popularity of international acquisitions as a strategic option for firms to grow and internationalize is reflected in the increased attention paid towards international acquisitions in international management research (Shimizu et al. 2004). Since earlier acquisition studies have traditionally concentrated on domestic acquisitions, one of the key challenges for studies on international acquisitions is to establish if and how international acquisitions differ from domestic ones. First, an understanding of these differences is vital in order to evaluate the extent to which general acquisition theories are applicable in international contexts, considering that these theories were most often developed for domestic settings. Secondly, establishing differences is important to justify the growth of international management studies that concentrate purely on international acquisitions. If international acquisitions do not differ from domestic ones, it can be argued that such examinations do not add value to domestic studies. Finally, an understanding of possible differences between domestic and international acquisitions is crucial for managers involved in managing either international acquisitions or both international and domestic ones.

The current evidence concerning differences across domestic and international acquisitions remains highly fragmented and inconclusive. Some studies have provided evidence for negative differences in international acquisitions in terms of lower profitability (Bühner, 1991), higher top management turnover (Krug & Hegarty, 1997), and higher employee resistance (Larsson & Finkelstein, 1999). On the other hand, others have found evidence for positive differences in international acquisitions in terms of higher cumulative abnormal returns (Bühner, 1991; Swenson, 1993), and higher average bid premiums (Harris & Ravenscraft, 1991). However, a large number of studies have established that no differences existed in critical aspects such as synergy realization (Larsson & Finkelstein, 1999), growth in sales (Lubatkin et al., 1998), performance index (Very et al., 1996), cumulative abnormal returns (Dewenter, 1995), stock prices (Eddy & Seifert, 1984), degree of acculturation (Larsson & Lubatkin, 2001), and acculturative stress (Very et al., 1996).

Due to the lack of consensus in previous research, there is a clear need to explore systematically the differences between domestic and international acquisitions. In order to explain the large variance in results presented in previous studies, it is important to go beyond looking merely at how acquisition outcomes differ to examining systematically how two important determinants of acquisition outcomes – strategic and organizational fit – differ across domestic and international acquisitions. Previous studies show that these two aspects of fit ultimately determine the overall outcome of the acquisition. Therefore, the aim of this paper is to explore in a systematic manner the differences in strategic and organizational fit between domestic and international acquisitions. With the help of MANCOVA analysis, we examine these differences using survey data from domestic and international acquisitions of Finnish companies over the period 1993-2000.
Theory and Hypotheses Development

**Strategic Fit in International Acquisitions**

Prior research in strategic management has focused on the role of strategic fit in post-acquisition integration (Salter & Weinhold, 1979; Lubatkin, 1983; Chatterjee, 1986; Lubatkin, 1987; Seth, 1990). Strategic fit can broadly be seen as the strategic compatibility of the acquiring and acquired firms. Based on the literature on diversification and industrial organization (Rumelt, 1974; Christensen et al. 1976), strategic fit is beneficial in acquisitions since it provides greater synergies in terms of enabling the two firms to operate more efficiently and/or more effectively (Lubatkin, 1983). In addition, from a resource-based view, strategic fit is beneficial because it offers greater possibilities for knowledge transfer between the firms (Bresman et al. 1999). A lack of strategic fit, in turn, is seen as detrimental for acquisition success because it implies that it will be difficult to create value from the acquisition. Accordingly, in this study we identify **synergy realization** and **knowledge transfer** as important aspects of strategic fit between the acquiring and the acquired firm. In the following, we will discuss how these aspects of strategic fit are likely to differ between domestic and international acquisitions.

Strategic fit was first mainly explored in the context of domestic acquisitions (Lubatkin, 1983; Chatterjee, 1986; Lubatkin, 1987). However, the increasing popularity of international acquisitions encouraged researchers to take a more international perspective and shifted attention to looking strategic fit in the context of international acquisitions, too. One group of these studies has examined only international acquisitions (Doukas & Travlos, 1988; Morosini & Singh, 1994; Datta & Puia, 1995; Bresman et al. 1999; Brock, 2005). Since domestic acquisitions are excluded from the sample, these studies offer little direct empirical evidence as to how international acquisitions differ from domestic ones in relation to strategic fit. However, to justify a focus on international acquisitions, these studies often contain an explicit or implicit assumption that achieving fit is more difficult – or at least different – in international acquisitions, which makes international acquisitions an interesting object of study in their own right. Another group of studies has included both domestic and international acquisitions in the sample, and thus inherently contains a comparative aspect (Harris & Ravenscraft, 1991; Larsson & Finkelstein, 1999; Krug & Hegarty, 2001).

**Synergy Realization**

Larsson and Finkelstein (1999) suggest that international acquisitions can enhance synergy potential, in ways not available domestically, by offering access to new markets and by providing globalization synergies. However, in international acquisitions, geographic distance together with legal, financial, and other country level differences render interaction and co-ordination more complicated and costly (Mirvis & Marks, 1992), which complicates the realization of potential synergies. Furthermore, international acquisitions are likely to raise nationalistic feelings in terms of animosities and prejudices based on historical and deeply rooted bases or caused by a bias in favor of maintaining the national identity of the organization on the grounds of managerial
and economic chauvinism (Olie, 1990). Cultural animosities and prejudices are likely to complicate the implementation of international acquisitions.

We suggest that, although the synergy potential may be higher in international acquisitions as suggested by Larsson and Finkelstein (1999), it is more difficult to fully realize this potential in international acquisitions. We argue that, in international acquisitions, the negative effect of implementation difficulties will be stronger than the positive effect of higher potential synergies, which results in a lower total level of synergy realization in international acquisitions compared with domestic ones.

Furthermore, the strategic logic – discussed in the configurational approach of acquisitions (Bower, 2001; Haspeslagh & Jemison, 1991; Hunt 1990) – is likely to be different in domestic and international acquisitions. Bower (2001) discusses five different acquisition strategies: overcapacity, geographic roll-up, product or market extension, R&D, and industry convergence. Domestic acquisitions are likely to include many overcapacity and industry convergence acquisitions in which synergy realization is an important goal. In contrast, international acquisitions are likely to contain many geographic roll-up and product/market extension acquisitions in which synergy realization in terms of cost-efficiencies is likely to play a less important role.

Therefore, we present the following hypothesis:

Hypothesis 1: International acquisitions are likely to have lower levels of synergy realization than domestic acquisitions.

Knowledge Transfer

Applying the ideas of Barney (1991), Morosini et al. (1998) propose that, in international acquisitions, a greater national cultural distance contributes to the acquired firm having a knowledge base that is significantly different from that of the acquiring firm. This kind of knowledge base is more likely to offer potential for knowledge transfer than a knowledge base that is very similar to that of the acquiring firm. Consequently, international acquisitions characterized by large national cultural distances are likely to offer the most potential for knowledge transfer and thus, result in superior performance. This argument is supported by the establishment of a positive relationship between national cultural distance and acquisition performance in the study of Morosini et al. (1998). However, since the study did not include domestic acquisitions, we cannot directly tell how they would have empirically differed from international ones.

Whereas particularly distant international acquisitions can contribute to knowledge transfer potential as argued above, it is not obvious that a greater potential will lead to an increase in the actual knowledge transfer. Bresman et al. (1999) showed that communication, visits, and meetings were significant predictors of knowledge transfers.

66 For example, the acquisition of international service units by large Finnish metals and machinery producing companies, such as Kone, Konecranes, Carcotec, and Metso, was an important trend in the 1990s. The acquisition strategy focused on expanding the firm’s presence in international markets (product/market extension.)
Since such interaction is likely to be more difficult in international acquisitions due to geographical distance and cultural barriers, realizing the potential of knowledge transfer may be more difficult in international acquisitions. Furthermore, in international acquisitions the local environment may contain barriers to knowledge transfer, such as different regulations and standards, which make the realization of knowledge transfer more difficult. We suggest that these geographical and legal barriers will more than offset the possible benefits of higher potential for knowledge transfer in international acquisitions. As a result, the level of knowledge transfer that is actually realized will be lower in international acquisitions than in domestic ones. Thus we suggest that:

Hypothesis 2: International acquisitions are likely to have lower levels of knowledge transfer.

Organizational Fit in International Acquisitions

In addition to the literature on strategic fit, another perspective has evolved according to which not only strategic fit but also organizational fit is important in post-acquisition integration (Sales & Mirvis, 1984; Buono et al., 1985; Buono & Bowditch, 1989; Cartwright & Cooper, 1993; Datta, 1991; Datta & Puia, 1995; Weber, 1996; Larsson & Risberg, 1998). The traditional argument within this perspective has been that organizational fit is desirable because it makes the integration process easier, which in turn can facilitate the realization of strategic fit and ultimately the realization of the expected benefits from the acquisition. In contrast, a lack of organizational fit is undesirable because it hinders the integration process, thus undermining the realization of strategic fit and, ultimately, the benefits from the acquisition.

Organizational fit has been considered at the level of national cultural differences (Calori et al., 1994; Napier et al., 1993; Morosini & Singh, 1994; Olie, 1994; Datta & Puia, 1995; Very et al., 1996; Very et al., 1997; Lubatkin et al., 1998; Morosini et al., 1998; Birkinshaw et al., 2000) and organizational cultural differences (Sales & Mirvis, 1984; Buono et al., 1985; Elsass & Veiga, 1994; Cartwright & Cooper, 1996; Weber, 1996; Weber, 1996; Weber et al., 1996; Datta, 1991). Several empirical studies suggest a negative effect for cultural differences on performance (Datta, 1991; Datta & Puia, 1995; Weber, 1996; Krug & Hegarty, 1997; Krug & Nigh, 1998; Larsson & Finkelstein, 1999; Lubatkin et al., 1999). Nevertheless, some studies have established a positive relationship (Swenson, 1993; Morosini et al., 1998), while others have found no significant relationship (Dewenter, 1995; Markides & Ittner, 1994; Very et al., 1996; Lubatkin et al., 1998; Markides & Oyon, 1998).

Research has also begun to accumulate on cultural change (Birkinshaw et al., 2000) and on complementary aspects of cultures (Olie, 1990, Veiga et al., 2000). Nahavandi and Malekzadeh (1988) suggest that initial cultural fit in the form of small cultural differences is not necessarily required since cultural change can take place even if the cultures and practices of the two organizations are considerably different. In fact, it is the complementarities between the two cultures that are important since complementary cultures can be combined and, as a result, a new shared culture based on the best practices of both cultures evolves (Mirvis & Marks, 1992). Through cultural change and building of new shared culture, the organizational fit can be improved. Drawing from
these earlier works, in this study we identify three aspects of organizational fit: prior organizational cultural differences, cultural change, and creation of a new, shared culture.

Similarly to strategic fit, organizational fit was first mainly explored in domestic acquisitions (Datta, 1991) and then applied to international acquisitions (Datta & Puia, 1995). The organizational fit perspective has flourished in international acquisition studies because cultural issues are considered to be particularly important in international acquisitions relative to domestic ones. The importance of culture in international acquisitions is explained by the need for “double-layered” integration (Barkema et al. 1996), which means the need for integrating not only two different organizational cultures as is the case in domestic acquisitions, but also two different national cultures. Thus, due to the increased complexity of double-layered integration, organizational fit is considered to be harder to achieve in international acquisitions than in domestic ones (Datta & Puia, 1995). In order to examine different aspects of organizational fit, we formulate separate hypotheses regarding organizational cultural differences, cultural change, and creation of new culture.

Organizational Cultural Differences

Since organizations can be viewed as open systems that are influenced by their environments, it is likely that national culture, as an important aspect of the environment, will influence the organizational cultures of the firms in a way that one should expect to see similarities among organizations within a society and dissimilarities across organizations between societies (Hofstede, 1980; House et al. 2004). Therefore, international acquisitions are more likely to bring together people with different values and beliefs than domestic acquisitions, which leads to larger organizational cultural differences in international acquisitions and consequently to a lower organizational fit. This view, however, is challenged by the findings of Very et al. (1997). Their study suggests that British acquired firms perceived domestic buyers as particularly incompatible and French acquired firms viewed domestic buyers as less compatible than U.S. buyers (Very et al. 1997). This challenges the view that cultural differences are indicative of cultural clashes because some cultural differences can, in fact, be perceived as attractive. However, we suggest that it is likely that, in absolute terms, organizational cultural differences are likely to be larger in international mergers than in domestic ones. Regardless of globalization trends, differences in organizations stem from, for instance, differences in the administrative heritage of the firms (Calori et al., 1997). Thus, we propose that:

Hypothesis 3: International acquisitions are likely to have higher levels of organizational cultural differences.

Cultural Change and Creation of a New, Shared Culture

Teerikangas and Very (2006) argue that it is important to consider that organizational cultures are not static throughout the post-acquisition integration. Cultural change refers to a change in perceptions of cultural differences as a result of an acquisition. In other
words, cultural change measures the extent to which organizational members abandon pre-acquisition culture either on the acquiring or acquired firm side. While at the beginning, the two firms’ organizational cultures may be different, successful post-acquisition integration brings them closer to one another (Teerikangas & Very 2006). As cultural differences are likely to give rise to ego defenses that maintain the existing identities of the acquirer and target, the resolution of cultural differences through cultural change is necessary for successful post-acquisition integration efforts (Schweiger & Goulet 2005).

**Creation of a new shared culture** measures the extent to which values and practices specific to the post-acquisition organization are created. Whereas cultural change can be one-sided, creation of a new shared culture requires changes in both acquiring and acquired firms. Building a new shared culture includes combining the best features of both firms’ cultures. It also requires removing the symbols of previous identities and replacing them with new symbols in both firms. Van Knippenberg, Van Knippenberg, Monden, and de Lima (2002) suggest that the extent to which employees are willing and able to identify themselves with the post-merger organization can be considered a key factor in the success of mergers. Likewise, DeNisi and Shin (2005) propose that if employees develop favorable merger identities with the new organization during the period of merger implementation they will highly commit themselves to the merger implementation. Similarly, Vaara (1999) argues that building a new shared culture and identity can be a particularly effective way of integrating previously separate organizations. By building a new shared culture and identity, management can help define a new category where both firms are psychologically merged (Olie 1994). Angwin and Vaara (2005) suggest that building this new shared culture creates joint commitment, reduces potential conflicts, and creates value for the firm.

However in international acquisitions, cultural differences are likely to be deeper embedded since the differences have their origins, at least to some extent, in national culture (Hofstede, 1980). Therefore, cultural differences in international acquisitions are likely to be more resistant to change than cultural differences in domestic acquisitions. In addition, deeply embedded cultural differences can be expected to complicate the building of a new culture that could serve as a co-ordination mechanism between the two companies (Olie, 1994; Larsson & Lubatkin, 2001).

An additional explanation would be that the strategic logic – discussed in the configurational approach of acquisitions (Bower, 2001; Haspeslagh & Jemison, 1991; Hunt 1990) – is different in domestic and international acquisitions. For instance, Haspeslagh and Jemison (1991) distinguish three different business strategies in acquisitions: acquiring a capability, acquiring a platform, and acquiring a business position. International acquisitions may more often be used as platform acquisitions than domestic acquisitions. Platform acquisitions, in turn, tend to be characterized by a relatively low level of operational and cultural integration (Haspeslagh & Jemison, 1991) because of the low interdependence need between the two firms.67 Similarly, we tested whether cultural change and creation of a new, shared culture were driven by conflicts resulting from cultural change resistance or from a lower level of operational integration. First, we entered cultural change as a dependent variable and conflict and operational integration (questions 39-41 of the questionnaire, see Appendix 1) as independent variables into a regression analysis. According to

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67 We tested whether cultural change and creation of a new, shared culture were driven by conflicts resulting from cultural change resistance or from a lower level of operational integration. First, we entered cultural change as a dependent variable and conflict and operational integration (questions 39-41 of the questionnaire, see Appendix 1) as independent variables into a regression analysis. According to
Bower (2001) discusses five different acquisition strategies: overcapacity, geographic roll-up, product or market extension, R&D, and industry convergence. International acquisitions are likely to contain many geographic roll-up acquisitions in which the required level of integration is lower than in, for example, industry convergence acquisitions.

Based on these arguments, we propose the following two hypotheses:

Hypothesis 4: International acquisitions are likely to have lower levels of cultural change.

Hypothesis 5: International acquisitions are likely to have lower levels of new, shared culture.

Methodology

Data

This essay is based on two data collection rounds. The first covered acquisitions during the period 1993-1996 and the second included acquisitions during the period 1997-2000. For a detailed discussion on data collection rounds, sampling criteria, questionnaire, and resulting sample, please sees earlier sections 4.1.1-4.1.5.

After controlling for missing values, the final database used in this essay included 373 answers from 190 acquisitions. 262 answers were received from the acquirer and 111 from the acquired company side. Out of 190 acquisitions, 105 were domestic acquisitions and 85 international ones (including e.g. 13 acquisitions in Germany, 12 in Sweden, 9 in Estonia, and 7 in the United States and Switzerland, 5 in Russia, 2 in China). Following previous acquisition studies that have included multiple respondents (Lubatkin et al., 1998; Lubatkin et al., 1999; Very et al., 1996; Weber, 1996; Weber et al., 1996), we averaged the scores provided by multiple respondents. Due to the possible industry and time-period specific nature of the study, additional descriptive statistics on the industries involved in the study as well as the sizes and the types of acquisitions are presented in Appendix 1.

The results, cultural change was driven by a low level of operational integration, as indicated by a positive and significant beta coefficient, whereas conflict did not explain cultural change. Second, the regression analysis was repeated with creation of a new shared culture as a dependent variable, which resulted in non-significant results. Thus, in terms of cultural change, the empirical results offer more support for the theoretical reasoning that links the acquisition strategy (in terms of the level of operational integration) to the subsequent level of cultural change. However, concerning the creation of a new culture, neither the level of cultural change resistance nor the acquisition strategy (in terms of the level of operational integration) explained the level of new culture that was created. Taken together, the tests suggested that there is a need of further theorizing and empirical testing concerning the factors that drive cultural change processes in acquisitions.
Measures

Domestic/international acquisition

We built a dummy variable to capture whether the acquired firm was domestic or international (domestic = 0, international = 1). This measure has been used in several previous acquisition studies (Harris & Ravenscraft, 1991; Krug & Hegarty, 1997, 2001; Larsson & Finkelstein, 1999; Capron et al. 2001; Larsson & Lubatkin, 2001; Davis & Nair, 2003).

Synergy realization

In previous studies, synergy realization has been measured as the level of achievement of the acquirer’s goals (Walter & Barney, 1990; Brock, 2005). In our opinion, goal achievement better reflects the overall success of the acquisition from the acquiring company viewpoint than the extent to which synergies were realized. Further, the unidimensionality of the scale poses a validity problem. Therefore, we opted for the creation of a multidimensional measure for synergy. We asked the respondents the following: When evaluating the current situation, have synergistic benefits (e.g. cost savings or efficiency improvements)\(^{68}\) been achieved by the integration of different operations? The respondents answered separately on 7-point Osgood scales (1 = not at all, 7 = very much) concerning the following five functions: management & control, sales & marketing, production, R&D, and finance. The mean of these questions represented the total amount of actual relatedness between the firms (\(\alpha = 0.86\)).

Knowledge transfer

We measured knowledge transfer following the example of previous studies (Capron & Mitchell, 1998; Bresman et al., 1999). We asked managers the extent to which knowledge transfer had resulted in benefits across the following five functions: management & control, sales & marketing, production, R&D, and finance. A seven-point Osgood scale (1 = not at all, 7 = very much) was used. The mean of these questions represented the total amount of knowledge transfer realized (\(\alpha = 0.79\)).

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\(^{68}\) This construct intends to measure synergy realization, in terms of synergy benefits achieved, in general. Although the respondents were given two specific examples of synergies (cost savings or efficiency improvements) that relate to operative/efficiency synergies, it is not the aim of the question to measure only these types of synergies. The concept of synergies is left vague intentionally and different types of synergies are not distinguished because they vary considerably between firms and industries. The focus is on the total level of synergies realized, not on the specific types of synergies. A functional approach is used to improve the construct validity of the measure to take into account differences between companies, for example, service companies do not have production in the traditional sense of the word. We consider this as an improvement compared with the synergy measures of Walter and Barney (1990) and Brock (2005).
Organizational cultural differences

Following the example and recommendations of previous studies (e.g. Chatterjee et al., 1992; Elsass & Veiga, 1994; Lubatkin et al., 1999; Weber 1996, Weber et al., 1996), we used direct questions concerning the prior perceived organizational cultural differences across the following dimensions: management & control, sales & marketing, production, R&D, finance, company values in general, and values of decision-makers. The respondents answered each question on a seven-point Osgood scale (1= no differences, 7= large differences). The mean of the questions represented overall organizational cultural differences ($\alpha = 0.82$).

Cultural change

While there is a great deal of debate in the literature on organizational culture about the relative merits of different approaches to measuring culture, and indeed about the measurability of culture in the first place (Denison, 1996), following the approach of Birkinshaw et al. (2000) our primary goal was to investigate whether there was a measurable change in culture over the course of the post-acquisition integration. Therefore, the respondents were asked to first evaluate organizational cultural differences prior to the acquisition and then to evaluate current organizational cultural differences. Respondents answered both questions separately along 7 dimensions (management & control, sales & marketing, production, R&D, finance, company values in general, and the values of decision-makers). Then we subtracted the scores of current organizational cultural differences from those of prior organizational cultural differences to represent change. The construct had a Cronbach’s alpha of 0.74.

Creation of a new, shared culture

This side of integration has been given attention in earlier mergers and acquisitions studies (Mirvis & Marks, 1992) and represents the actual cultural fit and complementarities of the two cultures. Our construct was based on three direct questions concerning the extent to which a new culture, new identity, and new practices shared by both companies had been created after the acquisition. The respondents answered both questions on an Osgood scale from 1 to 7 where 1 corresponded to “not at all” and 7 to “very much.” Cronbach’s alpha for the construct was 0.70. Although cultural change and creation of a new culture can conceptually be seen as somewhat overlapping, an exploratory factor analysis as well as high alpha values for both constructs supported their treatment as separate constructs.

Based on previous research, we included the following control variables as covariates:

Size

Following previous studies (e.g. Kusewitt, 1985; Morosini et al., 1998; Halebian & Finkelstein, 1999; Larsson & Finkelstein, 1999), we controlled for the size of the acquisition. We measured this as the turnover by the acquired company at the time of
Acquisition. Data were derived from a Talouselämä database on acquisitions. Descriptive statistics for this variable are reported in Appendix 1.

Time elapsed

Time elapsed since acquisition could have an impact on the outcome of acquisitions (Greenwood & Hinings, 1994; Very et al., 1997). We controlled for the possible temporal variance by recording the age of the merger as the number of years which had elapsed from the time of the merger to the time that we received the completed questionnaire (Very et al., 1997). Three dummy variables were created (1 year elapsed since the acquisition, 2 years elapsed since the acquisition, 3 years elapsed since the acquisition). Two of the dummy variables were inserted in the analysis in which they were being compared with the third variable. Data were derived from a Talouselämä database on acquisitions.

Service industry

Following Larsson and Lubatkin (2001) and Pablo (1994), we controlled for the service sector effect by using a dummy variable to indicate whether the acquisition was in the service industry (1 = service industry, 0 = others) using external data from the database of the financial magazine Talouselämä. Controlling for the service industry was considered important because the acquisition of international service units to large Finnish metals and machinery producing companies was an important trend in the 1990s.69

Time period

Acquisition activity is characterized by acquisition waves, each of which tends to be characterized by different motives. In different time periods, the firms buy systematically different types of firms that have different strategic and organizational fit characteristics. For example, during the first part of the 1990s there were relatively few acquisitions driven by knowledge-based motivations while towards the end of the 1990s these kinds of acquisitions became more important.70 Therefore, we formed a dummy variable to distinguish between the two data collection rounds included in this study (0 = round 1 during 1993-1996, 1 = round 2 during 1997-2000).71

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69 The effects of other major industries were explored as well but were found not to affect the results. Therefore, due to the data size limitations, only service industry is controlled for in this analysis.

70 At least, there was a growing importance of knowledge-based motives in the management rhetoric due to the increasing importance of knowledge-based views in the management studies.

71 Another possibility would have been to include separate dummy variables for each year. However, due to the data size limitations, it was preferable to add one dummy variable representing the different data collection rounds than adding five dummy variables to represent different years. The dummy representing the different data collection rounds is likely to capture fundamental changes between the beginning and the end of 1990s.
Analysis and Results

Table 1 provides the descriptive statistics and correlations for the variables included in the study. To compare domestic and international acquisitions, we used multivariate general linear modeling with SPSS 14.0 to implement MANCOVA analysis. We chose MANCOVA because one of its main purposes is to compare groups formed by categorical independent variables on group differences in a set of dependent variables, while the covariates serve as control variables that reduce the error term in the model (Tabacknick & Fidell, 2001). We included the following five dependent variables: synergy realization, knowledge transfer, organizational cultural differences, cultural change, and new culture. We adjusted for four covariates: size of the acquired firm, time elapsed, service industry, and time period (data collection round). The independent variable was a dummy variable classifying acquisitions as domestic or international.

We tested the model’s main effect after adjustments for differences of covariates. The multivariate F statistic of the international acquisition variable was 4.74, significant at the 0.001 level using Wilk’s criterion. This suggested that at a holistic or gestalt level, the domestic and international acquisitions appeared to be different considering the “fit” between acquirer and the acquired firms (Hair et al., 1998). Five univariate analyses of covariance (ANCOVAs) examined the main effect of each of the dependent variables. The results are presented in Table 2.

Concerning strategic fit, we found that synergy realization was lower in international acquisitions ($p < 0.05$) supporting hypothesis 1. International acquisitions were also associated with a lower level of knowledge transfer ($p < 0.10$), thus providing support for hypothesis 2. Related to organizational fit, we found that international acquisitions were associated with larger organizational cultural differences compared with domestic ones ($p < 0.01$), so supporting hypothesis 3. No significant differences were found related to cultural change (hypothesis 4). Finally, creation of new culture was found to be lower in international acquisitions ($p < 0.10$), which supported hypothesis 5.
## Table 1

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Foreign acquisitions (0 = domestic, 1 = foreign)</td>
<td>0.45</td>
<td>0.50</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Synergy realization</td>
<td>4.63</td>
<td>1.24</td>
<td>-0.21**</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>3. Knowledge transfer</td>
<td>4.59</td>
<td>1.05</td>
<td>-0.04</td>
<td>0.67***</td>
<td>1.00</td>
<td>1.00</td>
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<td>1.00</td>
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</tr>
<tr>
<td>4. Organizational cultural differences</td>
<td>4.89</td>
<td>1.05</td>
<td>0.07</td>
<td>0.13</td>
<td>0.46***</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>5. Cultural change</td>
<td>1.89</td>
<td>0.11</td>
<td>0.08</td>
<td>0.10</td>
<td>0.13***</td>
<td>0.35***</td>
<td>0.09</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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</tr>
<tr>
<td>6. New culture</td>
<td>4.15</td>
<td>0.95</td>
<td>-0.04</td>
<td>0.15*</td>
<td>0.28***</td>
<td>-0.03</td>
<td>0.09</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>7. Size</td>
<td>327.21</td>
<td>965.54</td>
<td>20.20**</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td>8. Two years elapsed since the acquisition</td>
<td>0.28</td>
<td>0.45</td>
<td>0.05</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
</tr>
<tr>
<td>9. Three years elapsed since the acquisition</td>
<td>0.18</td>
<td>0.39</td>
<td>-0.08</td>
<td>0.07</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.03</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
</tr>
<tr>
<td>10. Service industry</td>
<td>0.11</td>
<td>0.31</td>
<td>-0.23**</td>
<td>0.08</td>
<td>0.15*</td>
<td>0.08</td>
<td>0.12+</td>
<td>0.06</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
</tr>
<tr>
<td>11. Data collection round (0 = round 1, 1 = round 2)</td>
<td>0.56</td>
<td>0.50</td>
<td>-0.11</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
<td>0.14*</td>
</tr>
</tbody>
</table>

*p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001
<table>
<thead>
<tr>
<th>Dimension of fit</th>
<th>Dependent variable</th>
<th>Univariate F</th>
<th>Domestic acquisitions</th>
<th>Foreign acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Strategic fit</td>
<td>Synergy realization</td>
<td>2.22*</td>
<td>4.88</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Knowledge transfer</td>
<td>1.88+</td>
<td>4.64</td>
<td>1.05</td>
</tr>
<tr>
<td>Organizational fit</td>
<td>Organizational cultural differences</td>
<td>4.23**</td>
<td>4.75</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>Cultural change</td>
<td>1.31</td>
<td>2.00</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>New culture</td>
<td>1.87+</td>
<td>4.20</td>
<td>1.02</td>
</tr>
</tbody>
</table>

**Model Statistics**

- Wilk's Lambda: 0.87
- Multivariate F: 4.74***

a Independent variable: Domestic \ Foreign acquisition.
b The covariate model consists of acquisition size, time elapsed since acquisition, industry type, and data collection round.
+ p < 0.10,  p < 0.05,* p < 0.01, *** p < 0.001
Discussion

In this paper, our aim was to explore the differences in strategic and organizational fit between domestic and international acquisitions. First, we found that strategic fit – when measured as synergy realization or knowledge transfer – was lower in international acquisitions than in domestic ones. A possible explanation is the increased difficulty in coordination and control due to geographic distance as well as financial and legal barriers related to international acquisitions (Mirvis & Marks, 1992). Overall, our findings related to strategic fit imply that international acquisitions result in a lower level of synergy realization and knowledge transfer but the difference is larger when we look at synergy realization.

Second, we established that the level of organizational fit was lower in international acquisitions when measured as a higher level of prior organizational cultural differences and a lower level of creation of a new shared culture that can function as a cultural integration mechanism. This is in line with the argument that international acquisitions contribute to organizational cultural differences (Hofstede, 1980; House et al., 2004) and to negative sociocultural acquisition outcomes (Krug & Hegarty, 1997; Larsson & Finkelstein, 1999). This finding suggests that international acquisitions do not only differ regarding strategic aspects but they also differ across more organizational aspects. In particular, the finding of a lower level of building a new shared culture in international acquisitions points to the difficulties in successfully managing cultural integration in international acquisitions.

Finally, we found no difference in the level of organizational cultural change. By combining our findings of higher levels of initial cultural differences in international acquisitions, no differences in cultural change, and a lower level of building a new shared culture, we can conclude that international acquisitions remained more culturally separate than domestic ones. This is in line with our finding of a lower level of synergy realization and knowledge transfer in international acquisitions.

Thus, overall, our results suggest that in international acquisitions the two firms remain more strategically and organizationally separate than in domestic ones. The results could be explained by the existence of diverse types of acquisitions. Larger strategic and organizational differences in foreign acquisitions could signify that the strategic logic – discussed in the configurational approach of acquisitions (Bower, 2001; Haspeslagh & Jemison, 1991; Hunt 1990) – is different in domestic and international acquisitions. For instance, using Bower’s (2001) terminology, the results imply that domestic overcapacity and industry convergence deals may be compared with international geographic roll-up ones. Similarly, using Haspeslagh and Jemison’s (1991) terminology, the results suggest that domestic business position and capability acquisitions are compared with international platform acquisitions.
Conclusion

In conclusion, our study contributes to the research in international management by showing how domestic and international acquisitions differ across several aspects of both strategic and organizational fit. We showed that international acquisitions demonstrate a lower fit along several key dimensions. For researchers in international management, this implies that research on international acquisitions is warranted since these deals significantly differ from domestic ones. Further work on international acquisitions is needed to discover how to improve both strategic and organizational fit in international acquisitions and how they evolve over time. In addition, further research is needed to clarify the exact benefits that international acquisitions do offer in order to explain the popularity of international acquisitions regardless of the lower level of fit in these deals. Furthermore, it would be interesting to further explore how the configurational approach differs in domestic and international deals.

For managers, our study implies that careful consideration is needed before undertaking international acquisitions in order to carefully evaluate their potential. Further, improving both strategic and organizational fit in these ventures through operational and organizational integration is crucial. Thus, although it may be tempting to utilize integration strategies that do not aim at close integration in international acquisitions, our results suggest that such strategies in international acquisitions result in a lower realization of synergy and knowledge transfer.

Finally, while the study advances our knowledge concerning the differences between domestic and international acquisitions, some limitations should be noted. First, our data set is related to the Finnish context and to the specific industrial characteristics of Finnish acquisitions during the time period of this study. It is possible that variation between domestic and international acquisitions differs according to the home country, industry, and time period. Although control variables were included in this study to control for these external effects, a longitudinal multicountry sample would be needed to confirm the results. However, such exploration would most likely require the use of secondary data because collecting enough data relying on primary data would be challenging. Second, our study focused on the views of key decision-makers that represent the top levels of hierarchy. Although they should have the best overall picture of the integration processes, their perspectives are likely to differ from those of, for example, operating personnel. Finally, a time dimension is not present in cross-sectional data, which could explain some of the non-significant results.
References


APPENDIX 1

DESCRIPTIVE STATISTICS ON THE INDUSTRIES INVOLVED IN THE STUDY, THE TYPES OF ACQUISITIONS, AND THE SIZES OF THE ACQUIRED FIRMS

<table>
<thead>
<tr>
<th>Industry</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>9.3</td>
</tr>
<tr>
<td>Construction</td>
<td>7.9</td>
</tr>
<tr>
<td>Electronics</td>
<td>8.9</td>
</tr>
<tr>
<td>Graphics</td>
<td>7.9</td>
</tr>
<tr>
<td>Metal</td>
<td>17.7</td>
</tr>
<tr>
<td>Food</td>
<td>7.9</td>
</tr>
<tr>
<td>Forest industry</td>
<td>15.1</td>
</tr>
<tr>
<td>Textile industry</td>
<td>3.1</td>
</tr>
<tr>
<td>Energy</td>
<td>8.1</td>
</tr>
<tr>
<td>IT</td>
<td>0.7</td>
</tr>
<tr>
<td>Chemicals</td>
<td>3.6</td>
</tr>
<tr>
<td>Other</td>
<td>9.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size of the acquired firm (million FIM)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-50</td>
<td>34.40</td>
</tr>
<tr>
<td>51-100</td>
<td>27.30</td>
</tr>
<tr>
<td>101-200</td>
<td>19.40</td>
</tr>
<tr>
<td>201-300</td>
<td>3.30</td>
</tr>
<tr>
<td>301-400</td>
<td>2.70</td>
</tr>
<tr>
<td>401-500</td>
<td>0.70</td>
</tr>
<tr>
<td>501-600</td>
<td>1.20</td>
</tr>
<tr>
<td>601-700</td>
<td>0.50</td>
</tr>
<tr>
<td>701-800</td>
<td>0.70</td>
</tr>
<tr>
<td>801-900</td>
<td>1.20</td>
</tr>
<tr>
<td>901-1000</td>
<td>0.70</td>
</tr>
<tr>
<td>1001-1500</td>
<td>1.00</td>
</tr>
<tr>
<td>1501-2000</td>
<td>1.90</td>
</tr>
<tr>
<td>2001-2500</td>
<td>0.70</td>
</tr>
<tr>
<td>2501-3000</td>
<td>1.20</td>
</tr>
<tr>
<td>3001-3500</td>
<td>1.40</td>
</tr>
<tr>
<td>&gt;3501</td>
<td>1.70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of acquisition</th>
<th>Integration degree (ID)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 &lt; ID &lt;1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 &lt; ID &lt; 2</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>2 &lt; ID &lt; 3</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>3 &lt; ID &lt; 4</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>4 &lt; ID &lt; 5</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>5 &lt; ID &lt; 6</td>
<td>25.2</td>
</tr>
<tr>
<td></td>
<td>6 &lt; ID &lt; 7</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Based on the mean of questions 9a-9e. See Appendix 1 for further details on these questions. Scale: 1 = no integration, 7 = total integration
Essay 2: The Impact of Cultural Differences and Acculturation Factors on Post-Acquisition Conflict

In previous studies, the outcome of acquisitions has been linked to several factors related to strategy. Common themes addressed within the strategic management perspective include relatedness and strategic fit (Chatterjee, 1986; Lubatkin, 1983; Lubatkin, 1987; Salter & Weinhold, 1979; Seth, 1990), synergy (Harrison, Hitt, Hoskisson, & Ireland, 1991; Larsson & Finkelstein, 1999; Shaver, 2006), integration degree and integration modes (Empson, 2000; Haspeslagh & Jemison, 1991; Pablo, 1994; Shrivastava, 1986), previous acquisition experience and learning (Barkema & Vermeulen, 1998; Bresman, Birkinshaw, & Nobel, 1999; Haleblian & Finkelstein, 1999; Haspeslagh & Jemison, 1991; Hitt, Harrison, Ireland, & Best, 1998; Porrini, 2004), as well as knowledge transfer and innovation (Buono, 1997; Hitt, Hoskisson, Ireland, 1990; Karim & Mitchell, 2000; Lei & Hitt, 1995; Saxton & Dollinger, 2004). However, factors stemming from the strategic management perspective do not provide a complete understanding of why acquisitions fail. Napier (1989) suggests that many of the reasons for acquisition failure stem directly from human-resource-related problems. Acquisitions have far-reaching and often dysfunctional effects on organizational members (Napier, 1989). Buono (2003) points to the intergroup dynamics following the acquisition, such as the level of post-acquisition conflict, as significant determinants of acquisition success or failure.

Although previous research has recognized the importance of human resource aspects, Cartwright and Cooper (1995) argue that, unfortunately, this recognition has failed to translate itself into significant wide-scale empirical research on these aspects. Hence, improving our understanding of the human factor in acquisitions can enable a better understanding of the success and failure in acquisitions than is currently available (Bijlsma-Frankema, 2001). In this study, we concentrate on explaining one important human

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72 In this essay, strategic management perspective on acquisitions is defined as a perspective that is based on the strategic planning literature and views managers as information processors who identify opportunities and threats, formulate strategies to address them, and plan activities and organize people to implement strategies to achieve desired results (Mirvis & Marks 1992). Although there are overlappings between different theoretical perspectives, the strategic management perspective on acquisitions is different from the human resource and cultural perspectives (Larson & Finkelstein, 1999; Vaara, 2002). The human resource perspective focuses more on human resource aspects in acquisitions and draws on the human resource management literature while the cultural perspective focuses more on culture and draws more on insights from organizational behavior literature. It should be noted that in this classification a narrow view of strategy is used, which equals strategy mostly with strategic planning. Many strategy researches would, in fact, disagree and would consider human behavior to belong to the strategic management perspective in general (e.g. Mintzberg, Ahlstrand, & Lampel, 1998). Nevertheless, in this essay, strategic, human resource and cultural perspectives are seen as distinct. This view corresponds to the one used in several previous acquisition studies and is useful in differentiating between different acquisition research streams. A more detailed discussion on different theoretical perspectives on acquisitions can be found in chapter 2.4 of this thesis.
resource aspect in acquisitions, post-acquisition conflict. Post-acquisition conflict refers to inter-group tensions between the acquiring and acquired firm members.

In order to explain post-acquisition conflict, we turn to the cultural perspective on acquisitions. Although cultural factors have been linked to human resource outcomes in several theoretical papers (Elsass & Veiga, 1994; Nahavandi & Malekzadeh, 1988) and case studies (Buono, 2003; Sales & Mirvis, 1984), only few quantitative studies go beyond providing anecdotal evidence (Very, Lubatkin, & Calori, 1996; Birkinshaw, Bresman, & Håkanson, 2000; Larsson & Finkelstein, 1999). Quantitative studies within the cultural perspective have a tendency to link cultural factors directly to acquisition performance without testing the role that they play in determining human resource outcomes, such as post-acquisition conflict.

Therefore, the aim of this paper is to combine the cultural and human resource perspectives on acquisitions by examining the association between cultural factors and the level of post-acquisition conflict. Based on previous research on cultural factors in acquisitions, we include cultural differences both at the national and organizational cultural level. This is consistent with the review of Stahl and Voigt (2005), in which the authors call for studies focusing on how cultural differences affect socio-cultural integration in acquisitions. It is also in line with the study of Weber, Shenkar, and Raveh (1996), in which the authors call for studies including cultural differences both at the national and organizational cultural level. Weber et al. (1996) argue that culture research in acquisitions usually defines only one level of culture, which has led the bodies of literature on national and corporate culture to exist in isolation from each other. In order to establish the relative importance of national and organizational cultural levels in determining the level of post-acquisitions conflict, we include both levels of cultural differences.

Following the advice of Stahl and Voigt (2005) to examine other factors in addition to cultural differences that facilitate or constrain socio-cultural integration in acquisitions, we also include the following “acculturation factors” derived from acculturation theory (Berry, 1980; Nahavandi & Malekzadeh, 1988): multiculturalism, organizational cultural preservation, and attractiveness of the partner. Although theoretically plausible, their impact on post-acquisition conflict has not been empirically tested in large-scale previous studies.

**Literature Review**

**The Development of the Cultural Perspective on Acquisitions**

Early studies on acquisitions in management literature concentrated mainly on explaining strategic fit in acquisitions (Ansoff, Brandenburg, Portner, & Radosevich, 1971; Mace & Montgomery, 1962; Reed, 1977; Salter & Weinhold, 1979). Strategic fit can broadly be seen as the strategic compatibility of the acquiring and acquired firms. Based on the literature on diversification and industrial organization (Christensen, Berg, & Salter, 1976;
Rumelt, 1974), researchers argued that strategic fit is beneficial in acquisitions since it provides greater synergies in terms of enabling two firms to operate more efficiently and/or more effectively (Lubatkin, 1983). In the 1980s, this strategic management perspective remained strong (Bettis, 1981; Bettis & Hall, 1982; Chatterjee, 1986; Lubatkin, 1983; Lubatkin, 1987) and continues to be influential today (Harris & Ravenscraft, 1991; Haspeslagh & Jemison, 1991; Seth, 1990; Seth, Song, & Pettit, 2002).

However, strategic fit could explain only a part of the variance in acquisition performance, which suggested a need for complementary explanations. In the 1980s, a new trend began to emerge that emphasized human resource aspects in acquisitions (Buono & Bowditch, 1989; Napier, Simmons, & Stratton, 1989; Schweiger, Ivancevich, & Power, 1987). Instead of concentrating on linking strategic fit and performance, studies within the human resources perspective were more organizational behavior oriented and attempted to explain organizational resistance and its consequences (Cartwright & Cooper, 1990, 1993; Greenwood, Hinings, & Brown, 1994; Haundschild, Moreland & Murrell, 1994; Schweiger & Denisi, 1991). An overall theme in these human resource management reflections was that managers should pay specific attention to employee concerns and situation-specific considerations when making integration decisions. These studies also contain an explicit or implicit argument that financial performance is driven by how well the “human side” of the acquisition is managed.

Closely related, the cultural perspective has its roots in the human resources perspective. Researchers within the cultural perspective also emphasize the “human side” of the acquisition, but cultural variables and their impact on acquisition outcomes became the particular focus of this perspective (Buono, Bowditch, & Lewis, 1985; Nahavandi & Malekzadeh, 1988; Sales & Mirvis, 1984; Walter, 1985). According to the cultural perspective, cultural fit is an important aspect of the “human side” in acquisitions and just as, if not more, important than strategic fit. This increasing interest in culture in acquisition studies was connected to management research that began to link culture and firm performance in general (Peters & Waterman, 1982). Since the 1990s (Elsass & Veiga, 1994; Weber, 1996) and early 2000 (Larsson & Lubatkin, 2001; Schraeder & Self, 2003; Schweiger & Goulet, 2002), cultural aspects have received more and more support. Through the increasing number of studies, the cultural perspective has developed into a literature stream that complements both the strategic and human resources perspectives.

A common theme in the cultural perspective on acquisitions is that most studies tend to concentrate on post-acquisition integration. Successful post-acquisition integration is important in achieving the desired results in acquisitions (Saxton & Dollinger, 2004). Whereas the strategic management perspective views post-acquisition integration mainly as the integration of resources and the human resources perspective sees integration as the integration of people, the cultural perspective considers integration as acculturation – the integration of two cultures (Cartwright & Cooper, 1990). Thus, the cultural perspective

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73 Post-acquisition integration is defined by Haspeslagh and Jemison (1991) as the integration of the acquiring and acquired firms after the acquisition deal is closed.
primarily highlights the role that culture plays in determining post-acquisition success or failure. In the following, we will review the cultural factors discussed within the cultural perspective.

**Cultural Factors in Acquisition Research**

**Cultural differences**

A large part of research within cultural perspective has focused on the negative impact of cultural differences. At the organizational cultural level, researchers have argued that organizational cultural differences – differences in organizational beliefs and values – are major causes of organizational problems. When organizational differences are great, a common frame of reference between the organizational members is missing (Buono et al., 1985; Cartwright & Cooper, 1996; Elsass & Veiga, 1994; Sales & Mirvis, 1984; Weber 1996; Weber et al., 1996). Several quantitative studies have found that organizational cultural differences have a negative effect on acquisition performance (Chatterjee, Lubatkin, Schweiger, & Weber, 1992; Datta, 1991; Lubatkin, Schweiger, & Weber, 1999).

The argument regarding the negative effects of cultural differences has been extended to national cultural level as well. National cultural differences have been argued to have negative performance outcomes because of their complexity, which is related to geographic dispersion, differing local rules and regulations, uncertainty and information asymmetry, as well as incompatible beliefs, norms and practices (Olie, 1994; Schraeder & Self, 2003; Zaheer, 1995). Most of the empirical studies provide evidence of the negative performance effect of national cultural differences. Datta and Puia (1995) reported lower excess returns in international acquisitions belonging to the high cultural distance group. Weber et al. (1996) found that large national cultural differences predicted stress and negative attitudes in international mergers and acquisitions with high national cultural differences. In addition, Krug and Nigh (1998) reported that large national cultural differences were negatively related to post-acquisition performance as measured by top management departures.

While most of the studies have associated cultural differences with negative effects, others have shown that cultural differences can be sources of value and learning, especially at the national cultural level. Differences in the form of complementary resources may be sources of knowledge and capability transfer (Harrison et al., 1991; Morosini, Shane, & Singh, 1998) and contribute to competitive advantage and organizational learning (Barkema, Bell, & Pennings, 1996). Cultural differences can thus be potential sources of synergy (Larsson & Risberg, 1998). Furthermore, in culturally distant countries, overlaps are less likely to exist and thus the combination potential may be more complementary, and hence less threatening (Larsson & Finkelstein, 1999). The empirical evidence has shown that international acquisitions can offer more potential for synergy than domestic acquisitions (Larsson & Risberg, 1998), resulting in higher abnormal returns (Swenson, 1993), and fewer cultural problems (Very et al., 1996).
Acculturation factors

Other cultural factors that impact upon post-acquisition integration have been mainly derived from acculturation theory (Berry, 1980; Nahavandi & Malekzadeh, 1988). Acculturation theory describes the process of contact, conflict, and adaptation that is triggered by the acquisition (Cartwright & Cooper, 1993). Acculturation occurs through different modes depending on the characteristics of the acquiring and the acquired company (Nahavandi & Malekzadeh, 1988). Following Berry (1983), Nahavandi and Malekzadeh (1988) distinguish four modes of acculturation: **Integration** involves a high level of structural assimilation, but a low level of cultural and behavioral assimilation. **Assimilation**, in turn, describes a process in which the acquired firm is absorbed into the acquirer and ceases to exist as a cultural identity. **Separation** refers to an integration mode in which there is minimal cultural exchange between the two groups. Finally, **deculturation** means that the acquired company neither wants to keep its own culture nor wants to be assimilated into the acquiring company. Close adaptations of this framework of acquisition modes are presented by other researchers within the cultural perspective as well (Cartwright & Cooper, 1993; Elsass & Veiga, 1994).

The acculturation mode is determined by acculturation factors: multiculturalism, attractiveness of the partner, and organizational cultural preservation. Empirical evidence regarding the impact of acculturation factors remains scarce and inconclusive. Regarding attractiveness of the partner, there exist both qualitative and quantitative evidence for the importance of partner attractiveness as a key positive determinant of post-acquisition integration. However, it is mostly the attractiveness of the acquirer’s culture that has been considered (Birkinshaw et al., 2000; Nahavandi & Malekzadeh, 1988; Very, Lubatkin, Calori, & Veiga, 1997), with only few studies taking into account the attractiveness of both sides (Cartwright & Cooper, 1993). Concerning multiculturalism, quantitative studies suggest that multiculturalism negatively impacts upon the degree of integration (Pablo, 1994), but does not moderate the impact of cultural differences (Chatterjee et al., 1992). Finally, tendencies towards organizational cultural preservation have not been tested in quantitative studies at all, although theoretically cultural preservation is suggested to impact upon the integration process (Nahavandi & Malekzadeh, 1988; Sales & Mirvis, 1984). In the hypothesis section, we will present how these factors have been linked to post-acquisition conflict, but first, we will discuss post-acquisition conflict as an acquisition outcome in more detail.

Post-acquisition Conflict as an Acquisition Outcome

In previous literature, inter-group tensions following an acquisition are discussed under several slightly different labels. “Acculturative stress” includes behaviors and experiences that are disruptive (Berry, 1980). “Culture clash” refers to the negative emotional reactions

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74 According to Nahavandi and Malekzadeh (1988), an additional factor that determines the acculturation is the degree of relatedness between the firms. Since relatedness is related to strategic fit instead of cultural fit, we do not include it in acculturation factors. However, it is included in our empirical model as a control variable.
of organizational members towards the acquisition (Elsass & Veiga, 1994). “Merger syndrome” consists of feelings of uncertainty and insecurity as a result of the acquisition (Marks & Mirvis, 1985). “Culture collision” refers to organizational problems that result from poor cultural integration of the acquiring and acquired firms (Cartwright & Cooper, 1993). Finally, Yu, Engleman, and Van de Ven (2005) refer to a “vicious cycle of repeated conflicts” in how organizational members make sense of issues that emerge during post-acquisition integration. As all these terms describe the inter-group conflict in terms of the “us” versus “them” mentality that results from the acquisition, we define disruptive inter-group tensions collectively as “post-acquisition conflict”.

We have chosen to explain post-acquisition conflict for two main reasons. First, post-acquisition conflict has an important role in determining other types of post-acquisition outcomes, such as financial performance and synergy realization. For instance, Davy, Kinicki, Kilroy, and Scheck, (1988) suggest that human resource problems are responsible for between a third and half of all merger failures. In addition, Very et al. (1996) found that post-acquisition conflict, measured as acculturative stress, diminished the post-acquisition performance of the firm. Similarly, Larsson and Finkelstein (1999) showed that post-acquisition conflict, in terms of employee resistance, decreased synergy realization during post-acquisition integration. Therefore, in order to truly understand post-acquisition outcomes, it is important to understand the factors that determine the level of post-acquisition conflict. Second, previous quantitative studies have mainly concentrated on explaining accounting and stock-market-based performance. Larger scale quantitative studies that concentrate on explaining post-acquisition conflict remain scarce. However, such studies are needed in order to test the theories put forward in theoretical and qualitative papers.

In the following, we will develop our hypotheses and discuss how cultural factors – cultural differences and acculturation factors - are associated with post-acquisition conflict.
Hypothesis Development

Cultural Differences

National cultural differences

In international acquisitions, the acquirer and the acquired firm have different countries of origin. They are thus embedded in two different national cultural contexts. The concept of “national cultural differences” captures the differences in the norms, routines and repertoires that are found in the acquirer’s and the acquired firm’s countries (Morosini et al., 1998). A closely related concept to national cultural differences is “national cultural distance”, which attempts to mathematically quantify the overall level of national cultural differences. Introduced by Kogut and Singh (1988), they define national cultural distance as the degree to which the cultural norms in one country are different from those in another country.

National cultural differences can be challenging during the post-acquisition integration (Brock, 2005; Child, Falkner, & Pitkethly, 2001) because they are often associated with differences in legal systems, administrative practices, and working styles (Hofstede, 1980; Olie, 1994; Ouchi, 1980). In addition, the larger the national cultural differences, the more likely the values and beliefs of the organizational members from the acquiring and acquired firms will differ (Hofstede, 1980). Thus, national cultural differences increase the likelihood that a common frame of reference – in terms of shared values and beliefs – is missing. The lack of a common frame of reference, which would otherwise serve as a coordination mechanism, increases the likelihood of post-acquisition conflict (Olie, 1994).

Empirical studies have linked national cultural differences to post-acquisition challenges. Datta and Puia (1995) found that acquisitions characterized by high cultural differences were associated with lower shareholder value creation. Brock (2005) showed that national cultural differences complicated post-acquisition integration and resource sharing. We suggest that the underlying reason for these findings is due to post-acquisition conflict that hinders the value creation. This argument is in line with previous studies that have reported

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75 It can be argued that the hypotheses concerning cultural differences (hypotheses 1 and 2) are trivial because the impact of cultural differences has been explored extensively in previous acquisition studies. However, as discussed in the section 1.2 of this thesis that outlines the current research gap in the literature, previous studies have resulted in highly contradictory findings concerning the effect of cultural differences. I argue that this is at least partly due to the exclusion of multiple levels of cultural differences and acculturation factors in previous studies. Therefore, exploring the impact of cultural differences at multiple levels when acculturation factors are included in the model contributes to our understanding of the effect of cultural differences in acquisitions.
negative human resource implications of national cultural differences, such as stress and negative attitudes (Weber et al., 1996) and increase in top management turnover (Krug & Hegarty, 1997; Krug & Nigh, 1998). These findings lead us to hypothesize as follows:

Hypothesis 1: National cultural differences are positively related to post-acquisition conflict.

Organizational cultural differences

Organizational culture concerns symbols, values, ideologies, and assumptions within an organization (Cartwright & Cooper, 1993). Since each organization consists of several groups of individuals, each with its own unique culture, organizational culture can be seen as an umbrella under which multiple sub-cultures exist (Elsass & Veiga, 1994; Martin, Sitkin, & Boehm, 1985). The impact of organizational culture is far-reaching. Organizational culture creates organizational cohesiveness by binding individuals and organizational subgroups (Cartwright & Cooper, 1993). It also affects the decisions, policies, procedures, and strategy of the organization (Buono et al., 1985).

According to Buono et al., (1985), post-acquisition integration can be seen as an attempt to combine two different organizational cultures. The cultures of the acquiring and acquired firms are likely to differ from each other even in domestic contexts (Bijlsma-Frankema, 2001). Very et al. (1996) warn against the fallacy of assuming familiarity simply because the acquiring and the acquired firms share the same national culture. In fact, they found that some cultural problems were more amplified in domestic than in international acquisitions (Very et al., 1996).

Large organizational cultural differences act as restraining forces in post-acquisition integration because they increase the likelihood of negative human resource outcomes. Empirical evidence has linked organizational cultural differences to higher top-management turnover (Lubatkin et al., 1999), high levels of stress, tension and anger (Elsass & Veiga, 1994; Weber et al., 1996), low levels of trust and co-operation (Bijlsma-Frankema, 2001), cultural shock (Cartwright & Cooper, 1993), cultural conflict (David & Singh, 1993), as well as lower commitment and negative attitudes toward co-operation (Weber et al., 1996). Such negative reactions are explained by many employees feeling that they no longer fit into the environment and its dominant logic (Cartwright & Cooper, 1996). Another explanation is that cultural differences cause imperfectly shared understandings between the acquiring and acquired firms, which causes ambiguity and leads to post-acquisition conflict (David & Singh, 1993).

Case studies offer descriptions of how cultural differences can escalate to inter-organizational conflicts. For example, regarding the merger of Daimler-Benz and Chrysler, Daimler-Benz was an engineering-centered company, whereas Chrysler was more sales and marketing focused. Seo and Hill (2005) depicted how such fundamental differences between the firms caused co-operation problems and led to the resignation of several key senior leaders at Chrysler.
Therefore, we propose as follows:

Hypothesis 2: Organizational cultural differences are positively related to post-acquisition conflict.

**Acculturation Factors**

**Multiculturalism**

Multiculturalism is the degree to which an organization contains many different cultural groups, and values, tolerates and encourages cultural diversity (Nahavandi & Malekzadeh, 1988). If the acquirer is multicultural, it is more likely to value diversity (Nahavandi & Malekzadeh, 1988) and less likely to expect that the acquired firm conforms to the culture of the acquiring firm (Chatterjee et al., 1992). Furthermore, a multicultural acquirer is less likely to impose a high level of integration in situations where a lower level of integration is more adequate (Datta & Grant, 1990). Finally, multiculturalism can increase the likelihood of a multidirectional flow of cultural elements. Since unidirectional flows of cultural elements have been linked to post-acquisition conflict (Sales & Mirvis, 1984), multidirectional flows could result in a lower level of post-acquisition conflict. However, the multiculturalism of the acquirer could also lead to a situation in which the employees of both companies find the culture to be overly ambiguous, fragmented or conflictual. Employees are likely to experience such situations as stressful (Cartwright & Cooper, 1990), which could result in a higher level of post-acquisition conflict than a situation characterized by a unicultural acquirer.

As most studies offer support for a negative relationship, we propose as follows:

Hypothesis 3a: The multiculturalism of the acquirer is negatively related to post-acquisition conflict.

We suggest that multiculturalism of the *acquired firm* can also reduce post-acquisition conflict. Our theoretical argument is based on literature about cultural strength and cultural cohesion in respect of cultural change. Sales and Mirvis (1984), as well as Cartwright and Cooper (1993), suggest that firms with strong cultures are unlikely to give up their cultures easily. This is likely to lead to stronger change resistance and organizational conflict if cultural change is attempted as a result of an acquisition (Cartwright & Cooper, 1993; Sales & Mirvis, 1984). Similarly, in the study of Haundschild et al., (1994), strong organizational cohesion was identified as a characteristic that increases organizational resistance to an acquisition because the organizational members are more reluctant to abandon their old social identities. Therefore, we propose that integration of an acquired firm that is multicultural will lead to a lower level of post-acquisition conflict than integration of an acquired firm that has a strong unitary culture.
Hypothesis 3b: The multiculturalism of the acquired firm is negatively related to post-acquisition conflict.

Organizational cultural preservation

Organizational cultural preservation refers to the degree to which members of the organization wish to preserve their own culture and organizational practices (Nahavandi & Malekzadeh, 1988). Organizational cultural preservation can be explained from the perspective of social identity theory, which posits that most groups want to experience continuity with their identities (Haundschild et al., 1994). Since culture is central to a group’s identity, most groups attempt to preserve their cultures in order to keep their identities intact (Sales & Mirvis, 1984; Sidle, 2006).

In the acquisition context, the identities of the people from the acquiring and the acquired firm are still connected to their pre-acquisition organizations (Sidle, 2006). Organizational cultural preservation serves as a way for the organizational members to retain these pre-acquisition identities (Sales & Mirvis, 1984). Such preservation tendencies may take place even when there are no tangible threats, such as job loss. As Sidle (2006) notes, particularly organization members in the lower status system feel threatened by acquisitions that would blend them into a higher status system even in the absence of tangible threats.

Elsass and Veiga (1994) view organizational cultural preservation as a restraining force for integration because it prevents the blending of two separate cultural groups and the creation of an integrated whole from the two groups. When organizational members refuse to abandon their old identity and culture, intergroup-outgroup biases develop. This leads organizational members to treat one another unfairly, favoring people who belonged to their own group before the acquisition (Haundschild et al., 1994). Consequently, Sales and Mirvis (1984) theoretically identify cultural preservation as one of the main reasons for post-acquisition conflict.

As the acquirer is most often the dominant partner in the acquisition and attempts to impose cultural change on the acquired firm, organizational cultural preservation tendencies particularly in the acquired firm side have been suggested to impact on the preferred mode of acculturation and consequently the evolving of post-acquisition conflict (Nahavandi & Malekzadeh, 1988; Sales & Mirvis, 1984). Therefore, we present the following hypothesis:

Hypothesis 4a: Organizational cultural preservation in the acquiring firm is positively related to post-acquisition conflict.

We suggest that organizational cultural preservation on the acquirer side can also be problematic. First, creation of a new, shared organizational culture requires changes in both the acquirer and the acquired firm. If the acquirer insists on preserving its own culture, it negatively affects the building of a new shared organizational culture that would function as a co-ordination and control mechanism that generates commitment to the larger organization (Larsson & Lubatkin, 2001; Siehl & Martin, 1981). Second, cultural
preservation can also lead to excessive domination of the acquirer, as it seeks to protect its own culture. Being the dominant party contributes to condescending attitudes towards the other side (Marks & Mirvis, 2001). As the buying firm imposes its solution to the key decision areas of the acquired firm, it sends a definite signal to the acquired top management that their insights are not trusted (Very et al., 1997). Thus, we hypothesize also as follows:

Hypothesis 4b: Organizational cultural preservation in the acquired firm is positively related to post-acquisition conflict.

**Attractiveness of the partner**

Finally, the level of post-acquisition conflict may depend on the attractiveness of the partner. Drawing from Sales and Mirvis (1984) and Buono and Bowditch (1989), attractiveness of the partner refers to the perceptions that the acquisition partners have of each other and to the nature of the relationship between the companies. The organizational members are more likely to abandon their old culture and accept the new one if the new group seems attractive (Haundschild et al., 1994). However, if the new group seems inferior or its quality is uncertain, the organizational members reject the new culture. According to Haundschild et al. (1994), such cultural rejection results in change resistance, which leads to an “us” versus “them” mentality and a high level of post-acquisition conflict (Haundschild et al., 1994).

Attractiveness of the partner could also reduce fear of contamination in acquisition. According to Empson (2000, 2001), organizational members fear that the value connected to their personal image and their organization’s reputation will be diminished through the acquisition. Although reasons for such fears are often hard to justify by any objective criteria (Empson, 2000), fear of contamination is a potential source of organizational conflict. If the organizational members of the acquiring and the acquired firms have positive perceptions of each other’s organizations and cultures, they are less likely to expect negative consequences for themselves and their organization and thus less likely to show resistance.

In connection to partner attractiveness, most authors have emphasized the attractiveness of the acquirer, as perceived by the acquired firm (Nahavandi & Malekzadeh, 1988; Very et al., 1997). Therefore, we propose as follows:

Hypothesis 5a: Attractiveness of the acquirer is negatively related to post-acquisition conflict.

Although attractiveness of the acquiring firm has been emphasized, we suggest that the attractiveness of the acquired company, as viewed by the acquiring company, is also related to reducing post-acquisition conflict. According to Cartwright and Cooper (1993), successful integration depends on the acquirer’s perceptions that the culture of the acquired firm is attractive. In many cases, to achieve successful integration, changes are needed in
the culture of the acquiring firm, too (Haspeslagh & Jemison, 1991). However, if the acquirer perceives the culture of the acquired firm as unattractive, it may be reluctant to change its own culture. In addition, if the acquirer perceives the acquired firm’s culture as unattractive, the acquirer may impose its own culture on the acquired firm without considering the possible strengths and knowledge embedded in the acquired firm culture. Based on these arguments, we formulate the following hypotheses:

Hypothesis 5b: Attractiveness of the acquired firm is negatively related to post-acquisition conflict.

Method

Data Collection

In this paper, we analyze acquisitions carried out by Finnish companies in Finland and abroad during the period 2001-2004. For a detailed discussion on this data collection round, sampling criteria, questionnaire design, and resulting sample, please see earlier sections 4.1.1-4.1.5.

Sample

The response rate was 20.1%, comparing relatively well with that obtained by similar studies (Datta, 1991; Morosini et al., 1998; Schoenberg, 2004). The final data contained 118 responses from 100 acquisitions. In 85 acquisitions, we had single responses, and in 15 acquisitions we had multiple responses. 93 responses were from the acquiring firm side and 25 from the acquired firm side. 53% of the acquisitions in the sample were domestic acquisitions and 48% cross-cultural ones (including 7 acquisitions in Sweden; 5 in Germany; 3 in Estonia, Lithuania, and the USA; 2 in Austria, Canada, China, and the Netherlands; and 1 acquisition in Belgium, France, Great Britain, Norway, Poland, Switzerland and Uruguay). Before conducting our analysis, we averaged the scores provided by multiple respondents (Lubatkin, Calori, Very, & Veiga, 1998; Lubatkin et al., 1999; Very et al., 1996; Weber, 1996; Weber et al., 1996).

Dependent Variable

Post-acquisition conflict

In accordance with studies on social identity building (Pratt, 2001; Terry, 2001; Van Knippenberg & Van Leeuwen, 2001), post-acquisition conflict was measured by four questions on inter-group tensions: different opinions, co-operation problems, conflict, and mistrust between the merger partners. The answers to these questions were averaged to
represent the average level of post-acquisition conflict ($\alpha = 0.89$). Perceptual outcomes, such as post-acquisition conflict, are useful in that they provide a more direct connection to cultural values than accounting or stock market measures (Earley & Singh, 1995).

**Independent Variables**

**National cultural differences**

We measured national cultural differences by using the GLOBE practices scores (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Based on nine dimensions of GLOBE practice scores, we built an index of national cultural differences. Following the approach of Kogut and Singh (1988), our index of national cultural differences represented the aggregate national cultural distance of the two acquisition parties: 

$$CD_j = \sum_{i=1}^{9} \frac{(I_{ij} - I_{ij})^2}{V_i} / 9,$$

where:

- $CD_j$: The cultural difference for the $j$:th country
- $I_{ij}$: Globe score for $i$:th cultural dimension and $j$:th country
- $I_F$: Indicates Finland
- $V_i$: The variance of Globe score index of the $i$:th dimension

To build our other independent variables, we used exploratory factor analysis. We extracted six factors with eigenvalues over 1.0 using the principle component analysis extraction method and varimax rotation. These factors explained 71% of the variance. The factors and their loadings are reported in Table 1.

**Organizational cultural differences**

The first factor represents overall organizational cultural differences. It consists of questions about the extent of cultural differences in the following areas: management and control, sales and marketing, production, research and development, finance, and company values. Following the example of previous studies (Chatterjee et al., 1992; Lubatkin et al., 1999; Weber 1996, Weber et al., 1996), we used self-report questions concerning the

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76 Kogut and Singh (1988) used Hofstede’s (1980) scores for four national cultural dimensions in calculating the index. We chose to use the more recent GLOBE scores. We tested the model also by using Hofstede’s (1980) four dimensions, which resulted in essentially same results. This provided further validity for our results concerning national cultural differences. It is also consistent with the view that despite methodological differences, Hofstede’s and GLOBE measures are only variations of the same form of cultural research that utilized large-scale multi-country surveys (Earley, 2006) and should consequently produce similar types of results.

77 The results of the exploratory factor analysis were predictable, except for the questions concerning partner attractiveness, which loaded on one factor, instead of two factors as anticipated. However, the use of exploratory factor analysis is justified because it provided increased construct validity. The Varimax rotation also improved discriminant validity by reducing any possible multicollinearity between the constructs.
perceived cultural differences that existed before the acquisition. This was because they have been found to have a high reliability and validity in previous studies (Weber, 1996). According to Chatterjee et al., (1992) assessing perceptions of cultural differences, rather than examining the more tangible and objective outcomes of culture, such as reward structures or mission statements, can be advantageous because perceptions may be better predictors of consequent behavior. The behaviors and attitudes of organizational members are largely determined by their subjective perceptions rather than the objective situation (Rentch, 1990). Further, Elsass and Veiga (1994) suggest that perceived cultural differences are important because in-group members are increasingly likely to hold negative feelings towards out-group members as dissimilarity between the two groups increases. The factor loadings range from 0.65 to 0.72, and the construct has a Cronbach’s alpha value of 0.82.

**Multiculturalism of the acquirer**

The second factor can be interpreted as multiculturalism of the acquirer. The multiculturalism of the acquirer consists of the following aspects: i) the degree to which the culture of the acquirer was composed of several cultures, ii) the degree to which this plurality was tolerated, and iii) encouraged by the acquirer (Nahavandi & Malekzadeh, 1988; Pablo, 1994). The loadings for this factor range from 0.43 to 0.99 with a respective Cronbach’s alpha value of 0.66.  

**Multiculturalism of the acquired firm**

The third factor is similar to the second, except that it represents the acquired firm side. We measure multiculturalism of the acquired firm as the degree to which the culture of the acquired firm was composed of several cultures, as well as the degree to which this plurality was tolerated, and also encouraged by the acquired firm (Nahavandi & Malekzadeh, 1988; Pablo, 1994). The loadings for this factor range from 0.47 to 0.92 with a respective Cronbach’s alpha value of 0.72.

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78 We could have excluded the variable with the lowest factor loading (0.43) in order to increase the alpha value of the construct to 0.72. However, we wanted to keep the construct three dimensional so that it would better correspond to the underlying theory and to remain comparable with our other construct “multiculturalism of the acquired firm”. The alpha value of 0.66 is somewhat low but acceptable for social studies.
## TABLE 1
Results of Exploratory Factor Analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Organizational cultural differences</td>
<td>Cultural differences in production</td>
<td>0.72</td>
<td>0.06</td>
<td>0.09</td>
<td>0.11</td>
<td>0.06</td>
<td>-0.13</td>
</tr>
<tr>
<td></td>
<td>Cultural differences in R&amp;D</td>
<td>0.72</td>
<td>0.15</td>
<td>0.01</td>
<td>0.17</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Cultural differences in values</td>
<td>0.71</td>
<td>-0.07</td>
<td>-0.09</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.31</td>
</tr>
<tr>
<td></td>
<td>Cultural differences in management and control</td>
<td>0.70</td>
<td>-0.12</td>
<td>-0.08</td>
<td>0.02</td>
<td>-0.05</td>
<td>-0.19</td>
</tr>
<tr>
<td></td>
<td>Cultural differences in sales and marketing</td>
<td>0.65</td>
<td>0.08</td>
<td>-0.08</td>
<td>0.17</td>
<td>-0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>2 Multiculturalism</td>
<td>Tolerates cultural diversity (acquirer)</td>
<td>-0.07</td>
<td>0.99</td>
<td>0.05</td>
<td>0.07</td>
<td>-0.06</td>
<td>-0.04</td>
</tr>
<tr>
<td>(acquirer)</td>
<td>Values cultural diversity (acquirer)</td>
<td>0.09</td>
<td>0.57</td>
<td>0.09</td>
<td>0.04</td>
<td>-0.11</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Many different cultural groups (acquirer)</td>
<td>0.08</td>
<td>0.43</td>
<td>-0.25</td>
<td>0.09</td>
<td>-0.24</td>
<td>-0.17</td>
</tr>
<tr>
<td>3 Multiculturalism</td>
<td>Tolerates cultural diversity (acquired)</td>
<td>-0.09</td>
<td>0.08</td>
<td>0.92</td>
<td>-0.04</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>(acquired)</td>
<td>Values cultural diversity (acquired)</td>
<td>0.04</td>
<td>-0.08</td>
<td>0.64</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>Many different cultural groups (acquired)</td>
<td>-0.06</td>
<td>0.06</td>
<td>0.47</td>
<td>-0.17</td>
<td>-0.09</td>
<td>0.01</td>
</tr>
<tr>
<td>4 Organizational cultural</td>
<td>Preservation of culture (acquirer)</td>
<td>-0.35</td>
<td>0.08</td>
<td>0.09</td>
<td>0.98</td>
<td>0.08</td>
<td>-0.02</td>
</tr>
<tr>
<td>preservation (acquirer)</td>
<td>Preservation of organizational practices (acquirer)</td>
<td>-0.04</td>
<td>-0.06</td>
<td>-0.11</td>
<td>0.62</td>
<td>0.11</td>
<td>-0.12</td>
</tr>
<tr>
<td>5 Organizational cultural</td>
<td>Preservation of culture (acquired)</td>
<td>-0.18</td>
<td>-0.02</td>
<td>0.02</td>
<td>0.08</td>
<td>0.87</td>
<td>-0.04</td>
</tr>
<tr>
<td>preservation (acquired)</td>
<td>Preservation of organizational practices (acquired)</td>
<td>-0.07</td>
<td>0.09</td>
<td>-0.09</td>
<td>0.13</td>
<td>0.78</td>
<td>-0.11</td>
</tr>
<tr>
<td>6 Partner attractiveness</td>
<td>Attractiveness of acquired firm values</td>
<td>0.00</td>
<td>-0.17</td>
<td>0.04</td>
<td>-0.15</td>
<td>0.04</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Attractiveness of the acquiring firm values</td>
<td>-0.06</td>
<td>-0.15</td>
<td>-0.12</td>
<td>0.09</td>
<td>-0.32</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Attractiveness of the acquired firm practices</td>
<td>0.17</td>
<td>0.00</td>
<td>-0.09</td>
<td>-0.13</td>
<td>0.21</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>Attractiveness of the acquiring firm practices</td>
<td>0.18</td>
<td>0.16</td>
<td>-0.08</td>
<td>-0.02</td>
<td>-0.44</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Extraction method: Maximum likelihood.
Rotation method: Varimax with Kaiser normalization.
Rotation converged in 7 iterations.
Organizational cultural preservation by the acquirer

The fourth factor measures organizational cultural preservation by the acquirer as the extent to which the acquirer wanted to preserve i) its own culture and ii) its own organizational practices that existed prior to the acquisition (Nahavandi & Malekzadeh, 1988). The factor loadings of 0.98 and 0.62 and the Cronbach’s alpha value of 0.81 suggests that cultural preservation by the acquirer is a clear cultural dimension.

Organizational cultural preservation by the acquired firm

Accordingly, the fifth factor measures organizational cultural preservation by the acquired firm. It measures the extent to which the acquired firm wanted to preserve its own culture and its own organizational practices that existed prior to the acquisition (Nahavandi & Malekzadeh, 1988). The factor loadings are 0.87 and 0.78 and the Cronbach’s alpha value is 0.83.

Partner attractiveness

We measure attractiveness of the acquirer as perceived by the acquired firm by asking the respondents how the personnel of the acquired firm viewed i) the practices and ii) the values of the acquiring firm (Birkinshaw et al., 2000; Buono & Bowditch, 1989; Nahavandi & Malekzadeh, 1988). Similarly, we measure attractiveness of the acquired firm as perceived by the acquiring firm by asking the respondents how the personnel of the acquiring firm viewed i) the practices and ii) the values of the acquired firm. We initially expected that the questions would result in two factors, one describing the attractiveness of the acquirer and the other depicting the attractiveness of the acquired firm. However, the explanatory factor analysis shows that all four variables load on one factor ranging from 0.79 to 0.56. In addition, the Cronbach’s alpha value was higher when all four variables were included in the construct (0.79) than when divided into attractiveness of the acquired firm and attractiveness of the acquiring firm (α = 0.75 and α = 0.78 respectively). This suggests a close link between the attractiveness of the acquiring and the acquired firm. Thus, we combine our previous hypothesis 5a and 5b into hypothesis 5, which is related to the mutual attractiveness of the two firms:

Hypothesis 5: Partner attractiveness is negatively related to post-acquisition conflict.
Control Variables

Size

Following previous studies (Haleblian & Finkelstein, 1999; Kusewitt, 1985; Larsson & Finkelstein, 1999), we controlled for the size of the acquisition. A larger size for the acquired company could imply more potential for conflict. We measured this as the turnover by the acquired company at the time of acquisition. We conducted a logarithmic transformation for the variable, which is recommended for positively skewed variables in order to obtain a more normal distribution (Tabachnick & Fidell, 1996).

Actual relatedness

Actual relatedness has been suggested to affect post-acquisition outcomes (Morosini, Shane, & Singh, 1994; Morosini et al., 1998; Very et al., 1997) since the loss of autonomy that is often experienced in closely-related acquisitions can evoke tension and negative attitudes toward the merger (Weber, 1996). We captured the actual relatedness as the degree to which the acquired firm was combined to the acquirer (Lubatkin et al., 1998; Very et al., 1996, Very et al., 1997). We asked the managers to evaluate the degree of overall integration across the firm’s management & control, sales & marketing, production, R&D, and finance resources. A 7-point Osgood scale (1 = no integration, 7 = total integration) was used. A mean of these five questions represented the total amount of actual relatedness between the firms (α = 0.89).

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79 To avoid confusion, it should be noted that this measure is different from the “operational integration” measure in Essay 4 that attempts to capture only the operational aspects of the consolidation process.

80 The approach of measuring actual relatedness is based on the “merger relatedness” construct of Very et al. (1996, 1997) who argue that a problem with most measures of merger relatedness is that they are based on secondary data which, at best, capture potential relatedness by assuming negligible implementation costs. Therefore, Very et al. (1996) measure “actual” relatedness by surveying the perceptions of top managers concerning the managerial perceptions of the amount of actual consolidation across different functions of the firm ranging from “remained totally independent” to “totally combined”. The measure in this study is very similar in a sense that we attempt to measure the actual consolidation of the firms. Our “actual relatedness” construct measures the overall integration degree in order to capture the level of consolidation. It can be argued that this is a non-standard manner of measuring relatedness. We counter by arguing that this is not a non-standard manner in research of post-acquisitions integration considering that previous studies have used it (e.g. Very et al. in 1997) and that relatedness and integration degree are very closely related. A low level of relatedness, or what Haspeslagh and Jemison (1991) call interdependence, corresponds to a preservation integration approach that aims at a low integration degree (Haspeslagh & Jemison, 1991). In contrast, a high level of relatedness corresponds to an assimilation or symbiosis strategy both of which require a higher level of integration degree. We argue that our measure can be used as a proxy for actual relatedness considering the absence of alternative measures for the actual relatedness in the previous literature and the use of similar measures in the previous literature (Very et al. 1996, 1997).
Acquisition experience

We included the acquirer’s previous acquisition experience as a control variable because previous research has indicated that acquisition experience may impact upon acquisition outcomes (Lubatkin, 1983; Vermeulen & Barkema, 2001; Very & Schweiger, 2001). Since our sample included several acquirers with limited or no previous acquisition experience, the variable was positively skewed. We took a logarithm of the original variable to achieve a more normal distribution. The skewness value of the variable decreased from 5.500 to 1.432.

Tests for common method bias

Since our variables were both drawn from the same source, we checked for common method bias by conducting Harman’s single-factor test. The basic assumption of this technique is that if a substantial amount of common method variance is present, either a single factor will emerge from the factor analysis or one general factor will account for over 50% of the variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). When independent and dependent variables were included, our unrotated factor solution resulted in 8 factors. The largest factor explained 23.5% of the total variance. Based on Harman’s test we concluded that there was no serious common method variance present in our data.

Results

In order to identify possible collinearity in the model, we examined the correlation matrix (see Table 2) and values for the variance inflation factors (VIFs). There were no high correlations of 0.90 or above present in our models to suggest serious collinearity problem (Hair, Anderson, Tatham, & Black, 1998). The values for variance inflation factors (VIFs) were under the recommended limit of 8 ranging from 1.010 to the highest value of 1.169, clearly under the recommended limit of 8.

---

81 We first added a constant of 1 to all values of acquisition experience variable to obtain positive values that are required for the logarithmic transformation. Then, we took a logarithm of this variable.

82 The correlation table suggests that there is no correlation between national cultural differences and organizational cultural differences. This appears odd as the theory would suggest that many of the characteristics of the national culture tend to be embedded in the organizational culture. In addition, in Essay 1, it was found that organizational cultural differences tend to be higher in international than in domestic acquisitions. Accordingly, in Essay 4, when only international acquisitions were included in the sample, a correlation was found between national and organizational cultural differences. The absence of correlation in this essay could be due to the small number of international acquisitions in the sample. Due to the possible problems related to the small number of international acquisitions in the sample, the results of this essay concerning the effect of national cultural differences should be interpreted with caution.

83 Some researchers suggest that when correlations are above 0.8, variables should not be entered into the same regression model. Even correlations above 0.6 can begin to decrease the stability of multiple regression equations. The most significant correlation in this study was -0.518.
To separate the effects of control variables, cultural differences and acculturation factors, we built three models using hierarchical regression analysis. Model 1 is the baseline model, in which we included only the control variables. In model 2, we added to the control variables a set of independent variables that are related to cultural differences. In model 3, we further added a set of independent variables that are related to acculturation variables. Model 1 was not statistically significant ($F = 2.122$). Model 2 showed improvement over model 1 ($\Delta R^2 = 0.122, p < 0.01$) and was significant at the $p < 0.01$ level ($F = 4.234$). Model 3 was significantly better than model 2 ($\Delta R^2 = 0.300, p < 0.001$) and highly significant ($F = 8.348, p < 0.001$). Model 3 explained 48.4% of the variation in post-acquisition conflict ($R^2 = 0.484$). The results of the regression models can be seen in Table 3.

Our first hypothesis suggested a positive relationship between national cultural differences and post-acquisition conflict. This hypothesis was rejected because the variable was not significant. Concerning our second hypothesis, we proposed a positive relationship between organizational cultural differences and post-acquisition conflict. Organizational cultural differences were highly significant ($\beta = 0.328, p < 0.001$) in model 2 and remained highly significant also in model 3 ($\beta = 0.290, p < 0.001$), thus supporting hypothesis 2. In hypothesis 3a, we suggested a negative relationship between the multiculturalism of the acquirer and post-acquisition conflict. We found no evidence for this hypothesis.

Hypothesis 3b was similar to hypothesis 3a, but considered the multiculturalism of the acquired firm. We found no support for hypothesis 3b. Next, we proposed a positive relationship between organizational cultural preservation and post-acquisition conflict. We found that organizational cultural preservation both on the acquiring ($\beta = 0.214, p < 0.01$) and acquired firm side ($\beta = 0.191, p < 0.05$) significantly increased the level of post-acquisition conflict. Finally, we found strong support for hypothesis 5, which predicted a negative relationship between the attractiveness of the partner and post-acquisition conflict ($\beta = -0.476, p < 0.001$). Concerning our control variables, larger acquisitions were related to a higher level of post-acquisition conflict ($\beta = 0.172, p < 0.05$), whereas actual relatedness and acquisition experience of the acquirer were not related to post-acquisition conflict.

---

84 The statistical program used was SPSS 14.0.
85 Based on the correlation table, both national and organizational cultural differences are related to conflict, but when inserted together into a regression model, the effect of organizational cultural differences is stronger.
86 Based on the regression analysis, the relationship between organizational cultural preservation on the acquired firm side and conflict is stronger (significant at the $p < 0.01$) than based on the correlation analysis (significant at the $p < 0.05$). Therefore, the possibility of an interaction effect was examined by including the cultural preservation by the acquirer first alone into the regression model ($\beta = -0.199, p < 0.05$) and then adding other variables one by one in order to see which is the interacting variable that causes the coefficient to become more statistically significant. Organizational cultural preservation by the acquirer was found to negatively interact with partner attractiveness ($\beta = -0.194, p < 0.05$), indicating that cultural preservation increased conflict particularly in acquisitions characterized by a lack of partner attractiveness.
Discussion and Conclusions

This article explained an important human resource aspect in acquisitions – post-acquisition conflict – with factors related to cultural differences and acculturation factors. The first contribution of this study is related to the impact of cultural differences on post-acquisition conflict. Teerikangas and Very (2006), as well as Weber et al. (1996), establish that culture researchers in acquisitions, apart from the few studies examining national and organizational cultures simultaneously (Olie, 1990; Olie, 1994; Very et al. 1996; Very et al. 1997), usually define only one level of culture. The bodies of literature on national and organizational culture seem to exist in a state of isolation from each other, and very little is known of the relation between national and organizational culture (Weber et al., 1996; Very et al., 1996). This is in contrast with the trends towards a multilevel view of culture in sociological and organizational research (Teerikangas & Very, 2006).

In order to address this gap, we examined both national and organizational cultural differences separately. Teerikangas and Very (2006) stress how different the results of previous studies are depending on whether the impact of national and organizational cultural differences is explored, thus suggesting the importance of discriminating between these two levels of culture. We found that national and organizational cultural differences in acquisitions were not significantly correlated (r = -0.022), suggesting that they were clearly two different constructs. Furthermore, their influence on post-acquisition conflict differed significantly. Whereas organizational cultural differences appeared as very strong explanators, national cultural differences had no effect on the level of post-acquisition conflict. Our finding related to organizational cultural differences is in line with previous studies that have emphasized the role of organizational cultural differences in explaining socio-cultural post-acquisition outcomes (Larsson & Risberg, 1998; Larsson & Finkelstein, 1999; Lubatkin et al., 1999; Weber, 1996). In particular, our finding supports the results of Weber et al. (1996), who concluded that organizational culture resulted in lower top management commitment and lower co-operation between the partners.

The insignificant finding concerning national cultural differences suggests that, although national cultural differences have been linked to human resource outcomes such as top management turnover (Krug & Hegarty, 1997; Krug & Nigh, 1998), national cultural differences may not explain other types of human resource outcomes, such as post-acquisition conflict and change resistance. This finding is similar to that presented by Very et al. (1997), who found no evident clashing of national cultures in their sample.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>1 Size</td>
<td>1.132</td>
<td>0.592</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 Actual relatedness</td>
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<td>1.379</td>
<td>-0.168</td>
<td>1</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Acquisition experience</td>
<td>0.611</td>
<td>0.493</td>
<td>0.260*</td>
<td>-0.116</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 National cultural differences</td>
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<td>0.247*</td>
<td>-0.099</td>
<td>0.243*</td>
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<td></td>
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<td></td>
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<td>5 Organizational cultural difference</td>
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<td>0.915</td>
<td>-0.062</td>
<td>0.065</td>
<td>-0.076</td>
<td>-0.022</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Multiculturalism of acquirer</td>
<td>0.000</td>
<td>0.998</td>
<td>0.058</td>
<td>-0.162</td>
<td>-0.063</td>
<td>-0.030</td>
<td>-0.016</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>7 Multiculturalism of acquired</td>
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<td>-0.004</td>
<td>-0.061</td>
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<td>0.007</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>8 Cultural preservation by acquirer</td>
<td>0.000</td>
<td>0.996</td>
<td>-0.084</td>
<td>0.006</td>
<td>-0.154</td>
<td>-0.014</td>
<td>0.030</td>
<td>0.004</td>
<td>-0.012</td>
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<tr>
<td>9 Cultural preservation by acquired</td>
<td>0.000</td>
<td>0.924</td>
<td>0.151</td>
<td>-0.276**</td>
<td>0.101</td>
<td>-0.029</td>
<td>-0.025</td>
<td>-0.014</td>
<td>0.013</td>
<td>0.017</td>
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<tr>
<td>10 Partner attractiveness</td>
<td>0.000</td>
<td>0.922</td>
<td>-0.125</td>
<td>0.138</td>
<td>0.077</td>
<td>0.08</td>
<td>-0.059</td>
<td>-0.012</td>
<td>-0.004</td>
<td>0.009</td>
<td>-0.040</td>
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<tr>
<td>11 Post-acquisition conflict</td>
<td>3.026</td>
<td>1.236</td>
<td>0.237*</td>
<td>-0.124</td>
<td>0.032</td>
<td>-0.092</td>
<td>0.307**</td>
<td>0.027</td>
<td>-0.133</td>
<td>0.199*</td>
<td>0.236*</td>
<td>-0.518***</td>
</tr>
</tbody>
</table>

All two-tailed tests.

* p < .05
** p < .01
*** p < .001
### TABLE 3
Results of the Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1: Control variables</th>
<th>Model 2: Cultural differences</th>
<th>Model 3: Acculturation factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Control variables</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.226*</td>
<td>2.195</td>
<td>0.031</td>
</tr>
<tr>
<td>Actual relatedness</td>
<td>-0.088</td>
<td>-0.877</td>
<td>0.382</td>
</tr>
<tr>
<td>Acquisition experience</td>
<td>-0.035</td>
<td>-0.342</td>
<td>0.733</td>
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<tr>
<td>Cultural differences</td>
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<tr>
<td>National cultural differences</td>
<td>-0.131</td>
<td>-1.347</td>
<td>0.181</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>0.328***</td>
<td>3.501</td>
<td>0.001</td>
</tr>
<tr>
<td>Acculturation factors</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Multiculturalism of acquirer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiculturalism of acquired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural preservation by acquirer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural preservation by acquired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner attractiveness</td>
<td>-0.476***</td>
<td>-6.079</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Model statistics**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.249</td>
<td>0.429</td>
<td>0.696</td>
</tr>
<tr>
<td>R square</td>
<td>0.062</td>
<td>0.184</td>
<td>0.484</td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.033</td>
<td>0.141</td>
<td>0.426</td>
</tr>
<tr>
<td>Incremental R square</td>
<td>0.033</td>
<td>0.122**</td>
<td>0.300***</td>
</tr>
<tr>
<td>F</td>
<td>2.122</td>
<td>4.234**</td>
<td>8.348***</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

All two-tailed tests.  
Data in the table represent standardised beta coefficients.  
Dependent variable: Post-acquisition conflict.  
* p < .05  
** p < .01  
*** p < .001
Hence, this study suggests that the organizational cultures of the acquiring and acquired firms contain many differences that cannot directly be attributed to national cultural differences. It is these kinds of differences that tend to increase the level of conflict. A possible explanation could be that whereas national cultural differences are “known” and, thus, can be anticipated, organizational cultural differences are often more “tacit” or “hidden” to an outside analyst and are more difficult to anticipate in advance. In conclusion, the results demonstrate the importance of including both national and organizational cultural levels in the analysis. The culture-performance relationship appears more subtle and complex than is assumed in several previous studies and, thus, as suggested by Teerikangas and Very (2006), one should be more specific when discussing cultural differences in the acquisition context.

Related to the controversy of whether the impact of cultural differences is negative or positive, our study suggests that the human resource implications of organizational cultural differences are clearly negative. However, it is possible that cultural differences bring with them other advantages, such as acquiring different knowledge bases, which can be sources of value and learning (Doukas & Travlos, 1988; Harris & Ravenscraft, 1991; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Markides, Oyon, & Ittner, 1990; Morosini et al., 1998; Olie & Verwaal, 2004; Swenson, 1993). The end result of an acquisition would thus be the balance of human resource consequences such as post-acquisition conflict, and more strategic consequences such as knowledge transfer. The varying strength of these opposing forces would explain the contradictory results concerning the impact of cultural differences on acquisition performance. This suggests a further need for studies that concentrate on explaining different socio-cultural post-acquisition outcomes in order to clarify the different forces in acquisitions. Stahl and Voigt (2005) and Very (2006) suggest that studies relating cultural differences directly to accounting or financial performance often miss these important post-acquisition dynamics by concentrating only on the end financial result and not on the processes that lead to these results.

The second contribution of this paper is that it looks beyond cultural differences by providing large scale empirical evidence of the importance of acculturation factors – particularly partner attractiveness and organizational cultural preservation – in explaining human resource outcomes in acquisitions. Although theoretical papers and case study research has pointed to their importance, quantitative evidence linking these factors to different post-acquisition outcomes remains scarce. Our study suggests that acculturation factors should be included in models explaining post-acquisition outcomes because without these factors the models will be incomplete.

Most importantly, our study points to the strong positive impact of partner attractiveness. This result confirms the findings of previous research concerning the positive impacts of attractiveness of the acquirer (Olie, 1994; Very et al., 1996; Very et al., 1997). We extend these findings by showing the importance of partner attractiveness that is seen as “mutual” attractiveness, taking into account how both the acquiring and acquired firm perceived the other. This provides a more comprehensive picture of partner attractiveness in acquisitions than concentrating only on acquiring or acquired company perceptions of attractiveness. Combining the results concerning organizational cultural differences and partner attractiveness suggests that partner attractiveness more
than offsets the negative impact of organizational cultural differences. This implies a further need to explore partner attractiveness in acquisitions in order to understand what constitutes an “attractive” partner. In addition, “strategic attractiveness” in terms of strategic complementarities may not coincide with “cultural attractiveness”.

Another acculturation factor that received support in this study was organizational cultural preservation. Whereas theoretical studies have focused particularly on the cultural preservation tendencies on the acquired company side, we found that cultural preservation tendencies on the acquiring company side had an even greater impact. Previous studies have suggested that if the acquirer insists on preserving its own culture it negatively affects the building of a new shared organizational culture (Larsson & Lubatkin, 2001; Siehl & Martin, 1981), increases the likelihood of condescending attitudes towards the partner (Marks & Mirvis, 2001), and may lead to excessive domination of the acquirer. More research is needed to determine the factors that impact upon the level of organizational cultural preservation both on the acquiring and acquired firm side.

The limitations of this study should be noted. We use data of Finnish corporate acquisitions, which is related to the specific cultural and other characteristics of this setting. Also, the data are based on the subjective responses of the key decision-makers, which implies that there may be a common method bias. In addition, our focus on the top levels of hierarchy means that the views of top managers may differ, for example, from those of the operating staff. Additionally, the analyses are based on cross-sectional data. We acknowledge the problem of drawing inferences about causality with cross-sectional data – an inherent problem in these types of studies. Also, there is a limit associated with the investigation of acculturation variables in the context of a cross-sectional method of data collection. For instance, the level of partner attractiveness is likely to vary over time during the integration process. The use of longitudinal data would further strengthen the results and clarify the exact nature of the acculturation processes in post-acquisition integration.

Our study has clear managerial implications. First and foremost, this paper underlines the importance of the cultural perspective in explaining human resources outcomes in post-acquisition integration. Thus, cultural variables clearly contribute to the “human side” in acquisitions, which is an important determinant of acquisition success or failure. Therefore, the management should pay attention and “manage” organizational cultural differences and acculturation factors throughout post-acquisition processes. Management should concentrate on decreasing organizational cultural differences and building partner attraction through processes such as cultural integration and building a new culture shared by both parties that also help in overcoming organizational cultural preservation tendencies.
References


Essay 3: Cultural Differences, Cultural Change and New Culture as Explanations of Knowledge Transfer in Post-Acquisition Integration

In recent years, researchers have focused increasing attention on post-acquisition integration processes (Haseslagh & Jemison, 1991; Larsson & Finkelstein, 1999). In addition to more strategic or human resource perspectives, cultural approaches have gained ground (Angwin & Vaara, 2005; Stahl & Mendenhall, 2005). Most often, the focus has been on cultural differences as explanations of post-merger or post-acquisition problems and failures (Chatterjee, Lubatkin, Schweiger, & Weber, 1992; Datta, 1991; Weber, Shenkar, & Raveh, 1996). In international settings, it has been specifically argued that acquisitions from culturally closer nations lead to better outcomes than those from more distant national cultures (Datta & Puia, 1995; Krug & Hegarty 1997; Schoenberg 2004; Weber et al., 1996). However, it has also been proposed that cultural differences can be sources of value creation (Björkman, Stahl & Vaara, 2007, Morosini, Shane, & Singh, 1998). Other scholars have focused more attention on issues such as cultural compatibility (Cartwright & Cooper, 1993; Veiga, Lubatkin, Calori, & Very, 2000) and the dynamics of the acculturation processes (Elsass & Veiga, 1994; Larsson & Lubatkin, 2001; Nahavandi & Malekzadeh, 1988; Veiga et al., 2000).

Nevertheless, the fact remains that there is a paucity of knowledge regarding the role that cultural change processes related to cultural integration play in international acquisitions. Significantly less research attention has been focused on subsequent cultural change than on the impact of cultural differences. This is, however, crucial, if we want to better understand how exactly cultural dynamics are linked with value creation or organizational problems.

For this purpose, we need new conceptual tools. Hence, we put forth a new kind of framework where we distinguish both structural - national and organizational cultural differences - and processual cultural variables - cultural change and creation of new culture. In particular, we argue that these processual variables related to cultural integration are important facilitators of knowledge transfer in acquisitions and, thus, help to capture some of the most important dynamics of post-acquisition integration processes.

To test this conceptual model, we examine knowledge transfer in foreign acquisitions carried out by Finnish corporations in 1993-2004. The regression analyses performed show that adding process variables not only improves the explanatory power of cultural models but also clarifies the role that organizational and national cultural differences play in post-acquisition processes. In particular, national cultural differences seem to provide great potential for knowledge transfer. Also, cultural change and creation of new shared culture strongly contribute to knowledge transfer. In addition, cultural change and creation of new culture play a crucial role in moderating the impact of national cultural differences by further strengthening the positive impact of national cultural differences on knowledge transfer.

87 This essay is based on the article “Cultural Differences, Cultural Change and New Culture as Explanations of Knowledge Transfer in Post-Acquisition Integration” co-authored by Eero Vaara.
Prior Research on Post-Acquisition Integration

Post-acquisition integration has been studied from several perspectives. Strategic perspectives dominate M&A research. On the whole, strategy scholars have focused on organizational performance and the factors that are likely to influence it, such as relatedness (Chatterjee, 1986; Datta & Grant, 1990; King, Dalton, Daily, & Covin, 2004; Lubatkin, 1983; Lubatkin, 1987; Salter & Weinhold 1979, Seth 1990), friendly vs. hostile acquisitions (Harris & Ravenscraft, 1991; Sudarsanam & Mahate, 2006), methods of payment (Doukas & Travlos, 1988; Hayward & Hambrick, 1997; King et al., 2004; Markides & Ittner, 1994), prior acquisition experience (Haleblian & Finkelstein, 1999; King et al. 2004). However, they have also focused attention on how exactly value may be created in integration (Brush, 1996; Child, Pitkethly, & Faulkner, 1999; Haspeslagh & Jemison, 1991; Pablo, 1994; Schweiger & Very, 2003; Shrivastava, 1986). This has included analyses of knowledge transfer (Björkman et al., 2007, Bresman, Birkinshaw, & Nobel, 1999; Empson, 2000; Haspeslagh & Jemison, 1991; Hébert, Very, & Beamish, 2005).

Studies that are more human resource oriented have shared an interest in the organizational, social and sometimes even societal consequences of mergers and acquisitions. These studies have typically examined organizational resistance and its consequences (Buono & Bowditch, 1989; Cartwright & Cooper, 1990, 1993; Greenwood, Hinings, & Brown, 1994; Haundschild, Moreland & Murrell, 1994; Napier, Simmons, & Stratton, 1989; Schweiger, Ivancevich, & Power, 1987). Several studies have also focused on communication practices as a crucial issue from a managerial perspective (Schweiger & DeNisi, 1991; Schweiger & Goulet, 2005). An overall theme in these human resource management reflections has been that managers should pay specific attention to employee concerns and situation-specific considerations when making integration decisions (Buono & Bowditch, 1989).

Closely related studies adopting a cultural perspective have focused on cultural differences as indications and explanations of post-merger problems (Altendorf, 1986; Cartwright and Cooper, 1993; Chatterjee et al., 1992; Datta, 1991; Klepepestø, 1993; Larsson, 1993; Marks & Mirvis, 1986; Sales & Mirvis, 1984; Walter, 1985; Weber & Schweiger, 1992; Weber et al., 1996). In international settings, drawing on literature concerning different national cultural features, researchers have concentrated on national cultural differences and their implications (Björkman et al., 2007; Calori, Lubatkin, & Very, 1994; Gertsen, Soderberg, & Torp, 1998; Hébert et al. 2005, Larsson and Finkelstein, 1999; Lohrum, 1996; Morosini et al., 1998; Morosini, Shane, & Singh, 1994; Olie, 1994; Slangen 2006; Very, Calori, & Lubatkin, 1993; Very; Lubatkin, Calori, & Veiga, 1997; Villinger, 1996; Weber et al., 1996). Most studies in this field have endorsed the argument that national cultural differences explain post-acquisition failure, but some studies have recently claimed that cultural differences can also have a positive impact on post-acquisition performance (Hébert et al., 2005; Larsson & Finkelstein, 1999; Morosini et al., 1998, Slangen 2006).

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For a more comprehensive review on different theoretical perspectives within post-acquisition integration research, see sections 2.4.1-2.4.5 in the theoretical part of the thesis.
Rather than only focus on cultural differences, researchers within the cultural perspective have also examined the acculturation process following a merger or an acquisition (Elsass & Veiga, 1994; Larsson & Lubatkin, 2001; Nahavandi & Malekzadeh, 1988; Veiga et al., 2000). Key questions concern the attractiveness of the other organization and the kind of integration approach taken by the acquirer (Nahavandi & Malekzadeh, 1988). Interestingly, Veiga et al. (2000) have examined changes in cultural compatibility and found that performance was highest in cases where pre-merger cultural incompatibility turned into cultural compatibility after the merger (the poorest were in cases where cultural compatibility turned into incompatibility). Larsson and Lubatkin (2001) have, in turn, found that successful acculturation is possible even in conditions of significant cultural differences if the acquirer invests in formal and informal social control.

Cultural Dynamics and Knowledge Transfer in International Acquisitions

Previous studies have greatly contributed to our knowledge of post-acquisition integration process dynamics. The fact remains, however, that there is a paucity of knowledge of the role played by cultural factors in explaining these dynamics. In particular, our understanding of the role that cultural integration, in terms of cultural change processes, plays in value creation remains incomplete. One reason for this is that we lack conceptual tools that would allow us to analyze the role that cultural factors play in these processes. Hence, we put forth a new kind of framework where we distinguish both structural (national cultural differences and organizational cultural differences) and processual cultural variables (cultural change and creation of new culture) and explore their influence on knowledge transfer in foreign acquisitions.

Knowledge transfer

Drawing on resource-based and knowledge-based views as well as dynamic capabilities approach, researchers have argued that knowledge transfer is an increasingly important motive for acquisitions (Ahuja & Katila 2001, Finkelstein & Haleblian 2002, Gammelgaard 2004, Karim & Mitchell 2000). Acquisitions enable firms to obtain a unique knowledge stock of proven value that is difficult or time-consuming to imitate (Belberdos, 2003; Empson, 2001). Such a stock enables the firm to expand its product lines without the risk involved in internal innovation (Hitt, Hoskisson, & Ireland, 1990). In addition, acquisitions can decrease transaction costs related to protecting knowledge compared to market transactions or licensing agreements (Teece, Pisano, & Shuen, 1997). Also, tacit knowledge can be more easily obtained through acquisitions than through contractual arrangements (Karim & Mitchell, 2000).

Following Davenport and Prusak (1998), we define knowledge transfer as the transmission of knowledge – sending or presenting knowledge to a potential recipient – and absorption of knowledge by the recipient. In general, knowledge transfer has been linked to a better post-acquisition performance in previous acquisition studies (Bresman
et al., 1999; Haspeslagh & Jemison, 1991; Hébert et al., 2005). In the following, we suggest that cultural dynamics play a central role in these dynamics.

**Structural cultural variables**

**National cultural differences**

Literature on knowledge transfer suggests that cultural variations across nations can be a major factor influencing the process of knowledge transfer (Bhagat, Kedia, Harveston, & Triandis, 2002; Child & Rodrigues, 1996; Kedia & Bhagat, 1988). In each country, the firms have their own unique local network, which exposes them to new knowledge, ideas and opportunities in different ways (Andersson, Forsgren, & Holm, 2002; Holm, Holmström, & Sharma, 2005; McEvily & Zaheer, 1999; Schmid & Schurg, 2003). Foss and Pedersen (2003) use the term network-based knowledge to describe knowledge that has been accumulated from long-lasting interaction with actors in the external local environment. If the acquiring and the acquired firms are located in culturally distant countries, it is more likely that they have been exposed to different kind of network-based knowledge. Consequently, the knowledge stocks of the two firms are likely to be less duplicative, and therefore more valuable, compared with acquisitions to culturally close countries.

Accordingly, several authors have argued that national cultural differences can be sources of value creation in acquisitions (Doukas & Travlos, 1988; Harris & Ravenscraft, 1991; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Markides, Oyon, & Ittner, 1990; Morosini et al., 1998; Olie & Verwaal, 2004; Swenson, 1993). For example, the study of Larsson and Risberg (1998) showed that there were more synergy potentials and more efforts to realize these potentials in cross-cultural acquisitions compared to domestic ones. Furthermore, Larsson and Finkelstein (1999) showed that foreign acquisitions offered more combination potential than domestic acquisitions. Later, for instance Bjorkman et al. (2007) have further argued that there is a positive link precisely in the case of national cultural differences and knowledge transfer. In line with these prior studies, we argue that national cultural differences may provide valuable potential for knowledge transfer. Therefore, we present the following hypothesis

**Hypothesis 1:** National cultural differences are positively associated with knowledge transfer in acquisitions.

**Organizational cultural differences**

A central part of research on organizational cultural differences in the acquisition context has focused on the argument that organizational cultural differences – differences in organizational beliefs and values – are major causes of organizational problems (Buono, Bowditch, & Lewis, 1985; Cartwright & Cooper, 1996; Elsas & Veiga, 1994; Sales & Mirvis, 1984; Weber 1996; Weber et al., 1996). Also, building on the theory of acculturation, several studies have suggested that a lack of congruence
between the organizational cultures increases acculturative stress and reduces employee satisfaction (Nahavandi & Malekzadeh, 1988; Sales & Mirvis, 1984).

In addition, organizational cultural differences may lead to symbolic conflict – defined by Williams (2001) as the perception that an out-group violates core in-group values – because people have been socialized into specific cultural “reality” and have become accustomed and attached to specific practices, ideas and values characteristic to the in-group (Vaara et al. 2003). Based on these arguments, we suggest that organizational cultural differences may lead to an arduous relationship between the firms. According to Szulanski (1996), an arduous relationship is one of the main causes for what he terms the stickiness of knowledge, which is one of the main barriers for knowledge transfer.

Furthermore, organizational cultural differences may decrease the level of trust between the employees of the acquiring and the acquired firms. McAllister (1995) argues that, when two groups are culturally different, individuals are more likely to perceive the members of the other group as out-group members, and consequently, as less trustworthy. Trust has been linked to the openness of sharing knowledge (Nahapiet & Ghoshal, 1998) and to increased overall knowledge transfer (Abrams, Cross, Lesser, & Levin, 2003). Trust can also decrease fear of exploitation (Renzl, 2008) that Empson (2000) identifies as an important reason for employee’s hostility to knowledge transfer. According to Empson (2000), employees fear exploitation because they value their own knowledge more highly than that of their merger partner colleagues. Hence, employees have no incentive to cooperate in knowledge transfer as they believe that they will only lose in any knowledge exchange. Trust gives employees the confidence to be open with each other because they believe that knowledge shared will not be used against them (Zaheer, McEvily, & Perrone, 1998), which is likely to increase the willingness to engage in knowledge transfer.

Based on this argumentation, we propose that

**Hypothesis 2**: Organizational cultural differences are negatively associated with knowledge transfer in acquisitions.

**Processual cultural variables**

In addition to these structural variables, we also have to pay attention to the dynamics of cultural integration. Several authors argue that, at the end, overcoming problems related to knowledge transfer in acquisitions depends on the actions of management and their ability to manage the post-acquisition process (Greenwood et al., 1994; Haspeslagh & Jemison; 1991, Jemison & Sitkin, 1986; Shrivastava, 1986). For this purpose, we put forth two concepts that capture different dimensions of the cultural integration process: “cultural change” and “new culture”. In the following we argue that the ability of management to implement cultural change and to create a new, shared organizational culture is an important facilitator for knowledge transfer in acquisitions.
Cultural change

With a few exceptions, change in cultural differences has received surprisingly little attention in prior empirical research although as early as 1984, Sales and Mirvis (1984) proposed that cultural change is inherent in acquisitions as parties strive for co-existence in which differences can remain without conflict. Nahavandi and Malekzadeh (1988) suggested that even if the cultures and practices of the two organizations are considerably different prior the acquisitions cultural change can take place during the integration process to reduce these differences. Veiga et al. (2000), in turn, found that the acquisition performance was highest in cases where pre-merger cultural incompatibility turned into cultural compatibility after the merger.

We wish to develop the argument further by focusing on the impact of actual change in organizational cultural differences on knowledge transfer. We define “cultural change” as the change in initial organizational cultural differences between the acquiring and the acquired firms along existing cultural dimensions (Birkinshaw, Bresman, & Håkanson, 2000). This change can be seen as crucial in terms of capturing the degree to which the previous differences in beliefs, values and practices that may hinder cooperation have been reduced. The point is that decreasing organizational cultural differences will make any knowledge transfer easier than would otherwise be the case. In addition, cultural change facilitates communication between the organizational members from the acquiring and the acquired companies by ensuring that they have the same assumptions and consistent mental maps (Napier et al. 1989). Based on these arguments, we propose the following:

Hypothesis 3: Cultural change will be positively associated with knowledge transfer in acquisitions.

Creation of a new shared culture

Creation of a new shared culture is understood as development of a new cultural layer that emerges when new practices, values, and beliefs develop on top of the formerly separate practices, beliefs, and values of the acquiring and the acquired firms. Thus, creation of a new shared culture is conceptually distinct from cultural change. Whereas cultural change implies that one culture changes along existing cultural aspects to become more like the other one, creation of a new shared culture implies the addition of an entirely new cultural dimension. This is closely linked to identity-building: creation of distinctive beliefs, values and norms characteristic of the new merged organization (Hogg & Terry, 2000).

We suggest that creation of a new shared culture is an important mechanism to access embedded knowledge. A close reading of previous studies provides support for this view. Birkinshaw et al. (2000) showed how generating a shared identity between the merging firms led to the creation of much greater interdependencies between the acquiring and acquired firms. These interdependencies facilitated the transfer of embedded knowledge and resulted in knowledge transfer. In another study, Vaara, Tienari, and Björkman (2003) illustrated how the transfer of “best practices” was most effective when the practices were seen as joint inventions and part of the new merged
organization. Thus, creation of a new shared culture can be regarded as a facilitator of knowledge transfer.

Furthermore, we suggest that negative employee reactions related to refusal to cooperate in knowledge transfer can be decreased through creation of a new shared culture. When a new shared culture is built, pre-merger realities, such as mutually negative stereotyping, are altered and a new jointly determined identity and reality is reconstructed (Deal & Kennedy, 1982; Larsson & Lubatkin, 2001; Olie, 1994). As a result, a new shared culture helps to create a climate of mutual understanding and trust in which less hostility is displayed towards the acquisition partner (Van Knippenberg & Van Leeuwen, 2001). Through the processes outlined above, creation of a new shared culture is likely to reduce the likelihood of mistrust and hostility as well as fear of exploitation and contamination on the part of the employees, and consequently, to facilitate knowledge transfer. As Bresman et al. (1999) suggest, knowledge sharing takes place only when individuals possess a sense of shared identity or belonging with their colleagues. Accordingly, we propose the following:

Hypothesis 4: Creation of a new, shared culture will be positively associated with knowledge transfer.

The moderating role of cultural change and creation of a new shared culture in national culturally distant acquisitions

In hypothesis 1 we suggested that national cultural differences can be sources of value creation in acquisitions. Nevertheless, previous studies have shown that realizing the high knowledge transfer potential can be challenging in culturally distant international acquisitions because they bring with them specific problems and challenges (Datta & Puia, 1995; Krug & Hegarty, 1997; Krug & Nigh, 1998; Olie, 1994; Schoenberg, 1996; Schoenberg, 2004; Weber et al., 1996), which can impede knowledge transfer in culturally distant settings. Olie (1994) argues that organizational problems are heightened in national culturally distant acquisitions because they bring together people with different values and beliefs about the workplace, and this hinders effective cooperation (Olie, 1994).

Hofstede (1980) argued that, when there is cultural diversity among home cultures, a viable organization could be created through the development of a new organizational culture and identity. Larsson and Lubatkin (2001) found that successful acculturation is possible even in conditions of significant cultural differences if the acquirer invests in formal and informal social control. We suggest that both cultural change and creation of a new shared culture serve as mechanisms for creating a viable organization by aligning the differing practices, beliefs, and values and by encouraging cooperation. Through cultural change and creation of a new shared culture, the high potential for knowledge transfer in culturally distant acquisitions can be realized. Thus, we argue that both cultural change and creation of a new shared culture moderate the impact of national cultural differences on knowledge transfer. Along the above line of reasoning we hypothesize as follows:
Hypothesis 5: The positive association of cultural change and knowledge transfer will be greater in acquisitions where the national cultural differences are greater.

Hypothesis 6: The positive association of creation of new shared culture and knowledge transfer will be greater in acquisitions where the national cultural differences are greater.

Method

Sample

In this paper, we analyze foreign acquisitions carried out by Finnish corporations. We collected our data through three mail surveys, the first covering the period of 1993-1996, the second survey the period of 1997-2000, and the third survey the period of 2001-2004. For a detailed discussion on these data collection rounds, sampling criteria, questionnaire design, and resulting samples, please see earlier sections 4.1.1-4.1.5.

The three surveys resulted in a total number of 133 foreign acquisitions. On average, we received 1.65 answers per foreign acquisition resulting in a database of 220 answers. Of the answers, 70% were received from the acquirer side and 30% from the acquired firm side. Following an established method used in previous acquisition studies involving multiple respondents (Lubatkin, Calori, Very, & Veiga, 1998; Lubatkin, Schweiger, & Weber, 1999; Weber, 1996; Weber et al., 1996), we averaged the scores of multiple respondents to represent the general views of top management teams in acquisitions.

Measures

Knowledge transfer

We followed the example of previous studies on organizational knowledge transfer in multinational companies (Zander, 1991) and in acquisitions (Bresman et al., 1999; Capron & Mitchell, 1998). We measured knowledge transfer as the mean of five questions concerning the extent to which knowledge transfer had resulted in benefits across the following organizational functions: management and control, sales and

---

89 57 answers were received from acquisitions in Sweden, 35 from Germany, 18 from Switzerland, 18 from the USA, 14 from Estonia, 14 from Poland, 11 from Great Britain, 10 from Norway, 9 from Canada, 6 from France, 5 from Denmark, 5 from South Africa, 4 from Belgium, 3 from the Netherlands, 3 from Russia, 2 from Hungary, 2 from Italy and 1 answer each from Australia, Austria, Brasilia, China, Columbia, South Korea, Lithuania and Romania. Unfortunately, Estonia, Belgium, Lithuania and Latvia do not have GLOBE scores.
marketing, production, research and development, and finance. The Cronbach’s alpha for our knowledge transfer construct was 0.72.

National cultural differences

We measured national cultural distance by using the GLOBE practices scores (House, Hanges, Javidan, Dorfman, & Gupta, 2004). National cultural distance measures utilizing Hofstede’s (1980) scores have been widely criticized (Harzing, 2004; Shenkar, 2001; Tayeb, 1994). The GLOBE-project attempted to create more reliable national cultural differences scores. As opposed to Hofstede’s four dimensions (uncertainty avoidance, power distance, individualism, masculinity) and later fifth dimension (long-term orientation), GLOBE-scores have nine cultural dimensions: assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, power distance, and uncertainty avoidance. GLOBE-scores have been developed for both practices and values. We used the practices scores since they are particularly relevant for post-acquisition integration. Based on nine dimensions of GLOBE-practices scores, we built a composite index of national cultural differences following the formula of Kogut and Singh (1988). Our index of national cultural differences represented the aggregate national cultural differences of the two acquisition parties:

\[
CD_j = \sum_{i=1}^{9} \left( \frac{(I_{ij} - I_{ij})^2}{V_i} \right) / 9
\]

Where:

- \( CD_j \): The cultural difference for the \( j \)th country
- \( I_{ij} \): Globe score for \( i \)th cultural dimension and \( j \)th country
- \( F \): Indicates Finland
- \( V_i \): The variance in the Globe score index of the \( i \)th dimension

The interaction terms used in this study were formed by multiplying “cultural change” by “national cultural differences” and by multiplying “new shared culture” with “national cultural differences.

Organizational cultural differences

Following the example of previous studies (Chatterjee et al., 1992; Lubatkin et al., 1999; Weber, 1996; Weber et al., 1996), we used direct questions concerning the perceived cultural differences that existed before the acquisition as reported by top managers. We asked managers to describe the extent of cultural differences across key organizational functions (management & control, sales & marketing, production, R&D, finance, company values in general, values of decision-makers). The mean value of
these questions was used to represent overall organizational cultural differences. The Cronbach’s alpha for our organizational cultural differences construct was 0.77.

**Cultural change**

Following the approach of Birkinshaw et al. (2000), our goal was to investigate whether there was a measurable change in culture over the course of the post-acquisition integration. The respondents were asked to evaluate organizational cultural differences prior to the acquisition and to evaluate current organizational cultural differences. Assessing perceptions of cultural differences rather than examining the more tangible and objective outcomes of culture such as reward structures or mission statements is advantageous because perceptions are likely to be better predictors of behavior (Chatterjee et al., 1992). The more dissimilar the out-groups are perceived to be, the stronger the negative feelings in-group members are likely to hold (Elsass & Veiga, 1994). Respondents answered both questions separately along seven organizational dimensions (management & control, sales & marketing, production, R&D, finance, company values in general, values of decision-makers). To capture the change in organizational culture during the integration process, we calculated the change between the pre- and post-acquisition cultural differences via

\[
\left( \sum OCD_{\text{prior}} - \sum OCD_{\text{current}} \right)
\]

along the seven organizational dimensions.

The variables describing cultural change along different organizational dimensions where then entered into an exploratory factor analysis (see Table 1). We used principal component analysis as our estimation method with varimax rotation. The factor analysis suggested that the variables describing cultural change were clearly loaded on the same factor. The resulting factor scores for “cultural change” were used in the following regression analyses.

**New shared culture**

This side of integration has received attention in earlier mergers and acquisitions studies (Mirvis & Marks, 1992a, 1992b; Van Knippenberg & Van Leeuwen, 2001). Our construct was based on three questions concerning the extent to which a new culture, new identity, and new practices shared by both companies had been created after the acquisition. The respondents answered each question on an Osgood scale from 1 to 7 where 1 corresponded to “not at all” and 7 to “very much.” Based on the exploratory factor analyses, “new shared culture” was clearly a different cultural dimension from “cultural change” (see Table 1). The resulting factor scores for “new shared culture” were used in the following regression analyses.

90 The results of the exploratory factor analysis were predictable. However, the use of exploratory factor analysis is justified because it provided increased construct validity. The Varimax rotation also improved discriminant validity by reducing any possible multicollinearity between the “cultural change” and “new shared culture” constructs. The distinction between these two constructs is important because we argue that they capture clearly distinct types of cultural integration.
TABLE 1
Results of the factor analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cultural change</th>
<th>New shared culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural change in management and control</td>
<td>0.784</td>
<td>-0.069</td>
</tr>
<tr>
<td>Cultural change in sales and marketing</td>
<td>0.744</td>
<td>0.141</td>
</tr>
<tr>
<td>Cultural change in research and development</td>
<td>0.653</td>
<td>0.059</td>
</tr>
<tr>
<td>Cultural change in production</td>
<td>0.666</td>
<td>0.140</td>
</tr>
<tr>
<td>Cultural change in finance</td>
<td>0.598</td>
<td>-0.133</td>
</tr>
<tr>
<td>Cultural change in company values in general</td>
<td>0.684</td>
<td>0.062</td>
</tr>
<tr>
<td>Cultural change in decision makers values</td>
<td>0.760</td>
<td>0.062</td>
</tr>
<tr>
<td>Creation of a new shared culture</td>
<td>-0.078</td>
<td>0.867</td>
</tr>
<tr>
<td>Creation of a new shared identity</td>
<td>-0.057</td>
<td>0.898</td>
</tr>
<tr>
<td>Creation of new shared practices</td>
<td>0.190</td>
<td>0.385</td>
</tr>
</tbody>
</table>

Rotated component matrix.
Extraction method: Principal component analysis.
Rotation method: Varimax with Kaiser normalization.
Rotation converged in 3 iterations.

Control Variables

Size

Following previous studies (e.g. Halebian & Finkelstein, 1999; Kusewitt, 1985; Larsson & Finkelstein, 1999; Morosini et al., 1998), we controlled for the size of the acquisition. We measured this as the turnover by the acquired company at the time of acquisition using external data from the database of the financial magazine Talouselämä.

Industry

Following Larsson and Lubatkin (2001) and Pablo (1994), we controlled for the service sector effect by using a dummy variable to indicate whether the acquisition was in the service industry (1 = service industry, 0 = others) using external data from the database of the financial magazine Talouselämä.
Time elapsed

Time elapsed since acquisition could impact the outcome of acquisitions (Greenwood et al., 1994; Very et al., 1997). Bresman et al. (1999) found empirical evidence that knowledge transfer in acquisitions was positively related to time elapsed since acquisition. Given that our data were collected from 1 to 4 years after acquisition, we controlled for the possible temporal variance by recording the age of the merger as the number of years which transpired from the time of the merger to the time that we received the completed questionnaire (Very et al., 1997). We used external data provided by the database of the financial magazine *Talouselämä*.

Results

We examined the correlation matrix to identify any collinearity between the variables in our model. The correlation table suggested no serious collinearity problems (Hair, Anderson, Tatham, & Black, 1998) (see Table 2). Also, the values of variance inflation factors (VIFs) remained under the recommended limit of 8 in all models (see Table 3).

To discern the effects of independent and control variables in domestic and foreign acquisitions as well as to make a distinction between direct and interaction effects, we used hierarchical regression analysis to estimate four regression models (see Table 3). In Model 1, we tested the effect of control variables. In Model 2, we introduced structural variables to test hypothesis 1 and 2. Process variables were included in Model 3 to test hypothesis 3 and 4. Finally, in Model 4 we tested our interaction hypotheses (H5 and H6). All models except Model 1 are statistically significant.

Concerning Hypothesis 1, we found support for the proposition that national cultural differences were positively associated with knowledge transfer (Model 3: $\beta = 0.232^*$, Model 4: $\beta = 0.360^{***}$) after process variables were added to the model. Regarding hypothesis 2, although Model 2 initially suggested that organizational cultural differences were positively related to knowledge transfer ($\beta = 0.215^*$), which was contradictory to our hypothesis. However, including the process variables countered the effect. In other words, when the process variables were controlled for, organizational cultural differences were no longer significant. Our prediction in hypothesis 3 that cultural change would be positively associated with knowledge transfer was strongly supported (Model 3: $\beta = 0.429^{***}$). Consistent with our hypothesis 4, the association between creation of a new shared culture and knowledge transfer was positive and significant (Model 3: $\beta = 0.168^+$). In hypothesis 5, we suggested that the positive association of cultural change and knowledge transfer would be greater in national culturally distant acquisitions. We found strong support for this hypothesis as demonstrated by a positive and significant interaction term of cultural change and national cultural differences ($\beta = 0.662^{**}$). Similarly, hypothesis 6 proposed that the positive association of building a new shared culture and knowledge transfer would be greater in national culturally distant acquisitions. Hypothesis 6 was supported by the data ($\beta = 0.417^*$). As to control variables, time elapsed since acquisition was associated with knowledge transfer while size and industry were not.
TABLE 2  
Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Knowledge transfer</td>
<td>4.463</td>
<td>1.028</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Size</td>
<td>83.449</td>
<td>209.465</td>
<td>-0.158</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Industry</td>
<td>0.158</td>
<td>0.366</td>
<td>-0.101</td>
<td>-0.008</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Time elapsed</td>
<td>2.744</td>
<td>1.257</td>
<td>-0.107</td>
<td>-0.016</td>
<td>0.207*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 National cultural differences</td>
<td>0.498</td>
<td>0.158</td>
<td>0.279**</td>
<td>-0.114</td>
<td>-0.110</td>
<td>-0.055</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Organizational cultural differences</td>
<td>4.929</td>
<td>0.792</td>
<td>0.235**</td>
<td>-0.076</td>
<td>0.174*</td>
<td>0.015</td>
<td>0.135+</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Cultural change</td>
<td>0.000</td>
<td>1.000</td>
<td>0.386**</td>
<td>-0.071</td>
<td>0.156*</td>
<td>0.175*</td>
<td>0.026</td>
<td>0.547***</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 New culture</td>
<td>0.000</td>
<td>1.000</td>
<td>0.15+</td>
<td>0.029</td>
<td>0.048</td>
<td>0.091</td>
<td>0.024</td>
<td>0.019</td>
<td>0.000</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>9 Cultural change x national cultural differences</td>
<td>-0.025</td>
<td>0.536</td>
<td>0.415***</td>
<td>-0.066</td>
<td>0.053</td>
<td>0.137</td>
<td>-0.064</td>
<td>0.593***</td>
<td>0.893***</td>
<td>-0.043</td>
<td>1.000</td>
</tr>
<tr>
<td>10 New culture x national cultural differences</td>
<td>-0.003</td>
<td>0.519</td>
<td>0.143+</td>
<td>0.048</td>
<td>-0.015</td>
<td>0.086</td>
<td>-0.091</td>
<td>-0.063</td>
<td>-0.044</td>
<td>0.885***</td>
<td>-0.115</td>
</tr>
</tbody>
</table>

All two-tailed tests.
+ p < .10
* p < .05
** p < .01
*** p < .001

a. The mean and s.d for cultural change and new culture are based on factor scores from explorative factor analysis with varimax rotation.

b. The correlation between cultural change and new culture is zero because of varimax rotation.
TABLE 3
The results of the hierarchical regression analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
<td>VIF</td>
<td>Beta</td>
</tr>
<tr>
<td>Size</td>
<td>-0.160</td>
<td>-1.568</td>
<td>0.120</td>
<td>1.000</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.083</td>
<td>-0.793</td>
<td>0.430</td>
<td>1.045</td>
</tr>
<tr>
<td>Time elapsed</td>
<td>-0.092</td>
<td>-0.887</td>
<td>0.378</td>
<td>1.045</td>
</tr>
<tr>
<td>Structural variables</td>
<td>National cultural differences</td>
<td>0.221</td>
<td>2.221</td>
<td>0.029</td>
</tr>
<tr>
<td></td>
<td>Organizational cultural differences</td>
<td>0.215*</td>
<td>2.142</td>
<td>0.035</td>
</tr>
<tr>
<td>Process variables</td>
<td>Cultural change</td>
<td>0.429***</td>
<td>3.928</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>New culture</td>
<td>0.168+</td>
<td>1.872</td>
<td>0.064</td>
</tr>
<tr>
<td>Interaction variables</td>
<td>Cultural change x national cultural differences</td>
<td>0.662**</td>
<td>2.996</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>New culture x national cultural differences</td>
<td>0.417*</td>
<td>2.090</td>
<td>0.040</td>
</tr>
<tr>
<td>Model statistics</td>
<td>R</td>
<td>0.208</td>
<td>0.386</td>
<td>0.545</td>
</tr>
<tr>
<td></td>
<td>R square</td>
<td>0.043</td>
<td>0.149</td>
<td>0.297</td>
</tr>
<tr>
<td></td>
<td>Adjusted R square</td>
<td>0.012</td>
<td>0.102</td>
<td>0.241</td>
</tr>
<tr>
<td></td>
<td>Incremental R square</td>
<td>0.043</td>
<td>0.106**</td>
<td>0.148***</td>
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<td></td>
<td>F</td>
<td>1.392</td>
<td>3.158*</td>
<td>5.314***</td>
</tr>
</tbody>
</table>

a All two-tailed tests.
b Data in the table represent standardized beta coefficients.
c Dependent variable: Knowledge transfer.

+ p < .10
* p < .05
** p < .01
*** p < .001
Discussion and Conclusions

Despite a proliferation of studies taking a cultural perspective on mergers and acquisitions (Chatterjee et al., 1992; Datta, 1991; Weber et al., 1996), we still lack an understanding of the role that cultural differences and cultural integration play in acquisition value creation. Therefore, the purpose of this study was to examine the impact of both cultural differences and processual cultural variables on knowledge transfer in post-acquisition integration. Capturing the cultural dynamics is difficult as one is dealing with phenomena constructed by the organizational members when decisions concerning organizational changes are being made. We believe, however, that focusing attention on cultural change and creation of a new culture provides a useful means to examine some of the essential dynamics.

As to structural factors, we suggested that the knowledge stocks of the two firms were likely to be less duplicative, and therefore more valuable, in acquisitions to culturally distant countries. Accordingly, we hypothesized that national cultural differences would be positively associated with knowledge transfer in foreign acquisitions. Including processual cultural variables and interaction variables in the model assisted in distinguishing the clearly positive effect of national cultural differences. This finding is consistent with several previous studies that have linked national cultural differences to value creation in acquisitions (Björkman et al., 2007; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Morosini et al., 1998; Olie & Verwaal, 2004).

We further suggested that organizational cultural differences would have a negative effect on knowledge transfer. Several studies on organizational cultural differences in the acquisition context have focused on the argument that organizational cultural differences are major causes of organizational problems (Buono et al., 1985; Cartwright & Cooper, 1996; Elsass & Veiga, 1994; Nahavandi & Malekzadeh, 1988; Sales & Mirvis, 1984; Weber 1996; Weber et al., 1996). We argued that organizational cultural differences were likely to cause an arduous relationship between the firms and increase both the fear of exploration and the fear of contamination related to knowledge transfer. We therefore proposed that organizational cultural differences would be negatively associated with knowledge transfer in foreign acquisitions. However, after cultural process variables were controlled for, organizational cultural differences had no significant effect on knowledge transfer. This suggests that organizational cultural change processes are more important determinants of knowledge transfer than organizational cultural differences as such. This result is interesting as it implies that we should look beyond organizational cultural differences into organizational cultural change processes.91

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91 The alternating significance of cultural differences at the national and organizational cultural level is intriguing. According to the correlation table, it would seem that both levels of cultural differences are equally strongly and positively related to knowledge transfer. The stronger effect of the national cultural differences emerges only after the cultural process variables and interaction variables are introduced. This finding demonstrates the importance of including multiple levels of cultures and including both structural and processual cultural variables in order to identify the relative importance of each.
Concerning cultural process factors, we first focused on cultural change. We proposed that cultural change would have a positive impact on knowledge transfer by decreasing organizational cultural differences—and thus decreasing the potential for organizational conflict—as well as through improvements in communication resulting from more consistent assumptions and mental maps of organizational cultural members. We found a strong positive association between cultural change and knowledge transfer. Thus, our study shows that, when trying to understand the complex process of knowledge transfer in foreign acquisitions, it is fruitful to look beyond organizational cultural differences by distinguishing the extent of cultural change as measured by changes in perceptions of cultural differences. In this respect, we take a step further than studies that have concentrated on explaining the relationship between “cultural fit” and acquisition performance and suggest that it is the amount of change that matters, not the prior cultural differences as such. Whereas several studies have touched upon the issue of cultural change as an element that determines post-acquisition outcomes (Birkinshaw et al., 2000; Larsson & Finkelstein, 1999; Marks & Mirvis, 2001; Sales & Mirvis 1984), this study provides clear empirical evidence of their importance that can outweigh the importance of prior organizational cultural differences.

While some prior studies have pointed to the importance of another cultural mechanism—creation of a new shared culture (Buono & Bowditch, 1989; Olie, 1994)—this side of cultural integration has not been given adequate attention in previous research. Creation of a new shared culture implies a creation of an additional cultural dimension as a result of an acquisition. We suggested that creation of a new shared culture facilitates knowledge transfer by creating interdependencies that enable access to embedded knowledge and by creating a climate of mutual understanding and trust which reduces employees’ negative reactions to the merger in general, and knowledge transfer in particular. Our empirical results support this view.

We further argued that the increased potential for knowledge transfer in national culturally distant acquisitions implied in previous studies (Larsson & Finkelstein, 1991; Morosini et al., 1998) could be even more effectively realized through cultural change and creation of a new shared culture. The empirical results showed that the positive impact of both cultural change and creation of a new shared culture was amplified in acquisitions that were distant on the national cultural differences scale. This suggests that cultural process variables are influential facilitators for transfer of new knowledge, ideas, and opportunities stemming from partners’ network-based knowledge in culturally distant acquisitions. This finding is particularly interesting as it shows how the impact of national cultural differences is moderated by factors related to the management of the integration process—cultural change and creation of a new shared culture.

This study has its limitations which should be taken seriously. We use data of Finnish corporate acquisitions, which is related to the specific cultural and other characteristics of this setting. Also, the data are based on the subjective responses of the key decision-makers, which implies that there may be a common method bias. In addition, our focus on the top levels of hierarchy means that the views of top managers may differ, for example, from those of the operating staff. Additionally, the analyses are based on cross-sectional data. We acknowledge the problem of drawing inferences about causality with cross-sectional data—an inherent problem in these types of studies. It is
possible to argue that the causality works to the opposite direction because, for example, higher levels of knowledge transfer could facilitate the reduction of perceived cultural differences (cultural change) by informing the members of acquiring and acquired firms about each other’s cultural and about each other’s best practices. Also, the process of transferring knowledge might reduce cultural barriers because it relies on communication between different groups. In addition, there is a limit associated with the investigation of integration process variables in the context of a cross-sectional method of data collection. For instance, the level of cultural change is likely to vary over time during the integration process. The use of longitudinal data would further strengthen the results and confirm the direction of the causalities but only an in-depth and primarily qualitative study could clarify the exact nature of the cultural processes in post-acquisition integration. Finally, it is important to acknowledge that our knowledge transfer measure is limited in the extent to which it can represent the full complexity of the construct. More detailed measures, focusing on the transfer of different types of knowledge (e.g. tacit, marketing vs. technical knowledge) could further elaborate how the effect of cultural factors might differ depending on the type of knowledge. However, considering the small number of knowledge transfer analyses in the acquisition context, we think that our study contributes by linking cultural factors to knowledge transfer in the particular context of acquisition and thus paves the way for further more detailed analysis.

To conclude, previous studies on cultural differences have repeatedly called for studies that would identify variables that moderate the effect of cultural differences (Stahl & Voigt, 2005; Teerikangas & Very, 2006) and our study is an attempt to answer to this call. While we have elucidated the role of cultural dynamics in knowledge transfer, more research is evidently needed. It would be important to examine whether these findings also hold in other historical and cultural circumstances. It would also be interesting to further analyze the micro-processes of cultural change and creation of new shared culture to better understand how they are linked to knowledge transfer. In addition, one should go further in explicating the relationships of cultural process variables and other variables such the integration strategy. Interestingly, in a recent study Slangen (2006) showed that the level of post-acquisition integration moderated the relationship between national cultural distance and cross-border acquisition performance, with national cultural distance having a negative impact on performance at high levels of integration, and a positive impact at low levels. A challenge for future research would therefore be to try to reconcile such findings. Another variable to consider is integration effort or skillful management in general that could moderate the relationship between cultural differences and knowledge transfer in acquisitions. If one applies more skillful integration effort, then it is likely that more knowledge transfer will occur. In addition, a longitudinal research setting would allow exploring any learning effects in terms of how firms manage their foreign acquisitions. It would be interesting to examine, for example, whether firms learn to give more attention to managing the process of cultural integration over the years.

Finally, our study has clear managerial implications. First and foremost, this analysis underscores the importance of cultural factors in knowledge transfer. Hence, cultural variables do not merely contribute to the “human side” of acquisitions but also to concrete value creation in mergers and acquisitions. Thus, cultural factors should not
only be associated with “soft” issues but with “hard” ones as well. In fact, they should be “managed” throughout post-acquisition processes. By pointing to the importance of cultural change and the creation of new culture, this analysis shows that it is not only the initial cultural differences but, even more importantly, the change processes that greatly impact knowledge transfer in acquisitions. For managers, this contains an important message: by working on reducing organizational cultural differences and by investing in the creation of new joint culture and identity one can greatly support knowledge transfer.
References


Cultural differences have received considerable attention by scholars trying to understand the integration processes in international acquisitions. National and organizational cultural differences have been used to explain the frequent problems, disappointments, and failures encountered during the integration process (Stahl and Mendenhall, 2005). Several studies have provided support for the idea that organizational (Chatterjee, Lubatkin, Schweiger and Weber, 1992; Datta, 1991; Lubatkin, Calori, Very and Veiga, 1998; Weber, 1996) or national (Datta and Puia, 1995; Krug and Hegarty, 1997; Olie, 1994; Schoenberg, 2004; Weber, Shenkar and Raveh., 1996) cultural differences contribute to poor performance. However, it has also been argued that cultural differences may serve as sources of value creation, and there is some empirical evidence that they may in fact improve post-acquisition performance (Larsson and Risberg, 1998; Morosini, Shane and Singh, 1998). Other studies have criticized simplistic cultural analyses because they tend to rely on problematic measures of cultural distance (Kirkman, Lowe and Gibson, 2006; Shenkar, 2001), or fail to include relevant mediating or moderating variables (Björkman, Stahl and Vaara, 2007; Stahl and Voigt, 2005; Teerikangas and Very, 2006). Still others have suggested that rather than focusing on cultural difference per se, one should examine post-acquisition acculturation (Elsass and Veiga, 1994; Larsson and Lubatkin, 2001; Nahavandi and Malekzadeh, 1988) or sensemaking (Vaara, 2003) processes.

We argue in this paper that one of the reasons for these contradictory views and mixed empirical findings is that most existing analyses have treated the integration process as a ‘black box’ without singling out the processes and mechanisms through which various kinds of cultural difference affect post-acquisition process dynamics (see also King, Dalton, Daily and Covin, 2004; Shimizu, Hitt, Vaidyanath and Pisano, 2004). Distinguishing such mechanisms is, however, needed if we want to better understand the complex and potentially contradictory effects of cultural differences on the key post-acquisition integration process outcomes of social conflicts and knowledge transfer. Social conflicts have commonly been seen as a source of acquisition failures (Cartwright and Cooper, 1992; Empson, 2001) and knowledge transfer between the acquiring and acquired units a crucial determinant of the ultimate success of an acquisition (Haspeslagh and Jemison, 1991; Capron, Dussage and Mitchell, 1998; Bresman, Birkinshaw and Nobel, 1999).

To partially fill this gap, we examine mechanisms through which national and organizational cultural differences may impact post-acquisition dynamics. First, we suggest that national and organizational cultural differences tend to increase social conflict and thus have a negative impact on post-acquisition processes. Second, we argue that at the same time, cultural differences constitute potential complementary

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92 This essay is based on the article “The Impact of National and Organizational Cultural Differences on Social Conflict and Knowledge Transfer in International Acquisitions: A Causal Model and an Empirical Test” co-authored by Eero Vaara, Guenter Stahl, and Ingmar Björkman.
resources that can be exploited through knowledge transfer between the acquiring and acquired organizations. We further propose that social conflict has a negative impact on knowledge transfer and that the mechanisms through which cultural differences affect acquisition process outcomes are influenced by the integration approach taken, as manifested in the degree of operational integration.

The remainder of the paper is structured as follows. After a brief overview of the previous research, we develop our model and specify the causal relationships between the key variables. We then proceed to test the model on a sample of 123 international acquisitions carried out by Finnish corporations using data on national cultural differences from the GLOBE study (House, Hanges, Javidan, Dorfman and Gupta, 2004) and perceptual measures of organizational cultural differences and post-acquisition integration outcomes. Most interestingly, the structural equation analysis shows that while organizational cultural differences have a positive effect on social conflict, national cultural differences have a negative impact. As hypothesized, both national and organizational cultural differences have a positive effect on knowledge transfer. Furthermore, social conflict has a significant negative impact on knowledge transfer. We conclude the paper with a discussion of the implications of the findings, the overall contribution of this analysis, and suggestions for future research.

A review of prior research

While there were some early exceptions (Davis, 1968), researchers did not systematically examine mergers and acquisitions from cultural perspectives until the mid-1980s. By this time, the problems and disappointments in mergers and acquisitions had shown that new perspectives were needed to understand the dynamics of post-acquisition integration. This triggered a wave of studies adopting a process perspective on mergers and acquisitions (Haspeslagh and Jemison, 1991; Hunt, 1990; Jemison and Sitkin, 1986). By this time, cultural analyses had become increasingly popular and legitimate in organization and management studies (Hofstede, 1980; Peters and Waterman, 1982; Pettigrew, 1979), paving the way for their adoption in the acquisition context as well (Altendorf, 1986; Shrivastava, 1986; Walter, 1985). Subsequently, there has been a proliferation of acquisition studies focusing on ‘cultural clashes’ between merger parties (Buono, Bowditch and Lewis, 1985; Chatterjee et al., 1992; Datta, 1991; Elsas and Veiga, 1994; Larsson, 1993; Marks and Mirvis, 1986; Sales and Mirvis, 1984; Weber, 1996; Weber and Schweiger, 1992). In international settings, drawing on Hofstede’s (1980, 1991) and Trompenaars’ (1993) work, researchers have focused on national cultural differences (Calori, Lubatkin and Very, 1994; Gertsen, Søderberg and Torp, 1998; Lubatkin et al., 1998; Larsson and Lubatkin, 2001; Morosini and Singh, 1994; Olie, 1994; Very, Lubatkin, Calori and Veiga, 1997; Weber et al., 1996). However, rather surprisingly, studies of cross-border mergers and acquisitions have rarely included both national and organizational cultural factors in the same analyses (for an exception, see Weber et al., 1996).

Much of the existing research has focused on the cultural distance between the acquiring and the acquired organizations. This perspective builds on realist conceptions of organizational (Schein 1985) and national cultural differences (Hofstede, 1980; 1991; Ghemawat, 2001). Accordingly, these analyses rest on the idea that the cultural differences measured between the combining organizations form a critical determinant
of the subsequent integration process (Cartwright and Cooper, 1992, 1993; David and Singh, 1994; Morosini and Singh, 1994). Most of these studies have considered cultural differences to be the cause of integration problems. For example, Chatterjee et al. (1992), Datta (1991), and Weber (1996) found a negative relationship between organizational cultural differences and post-acquisition performance. In international settings, scholars have argued and reported some supporting evidence that acquisitions of firms from culturally closer nations lead to better outcomes than those from more distant national cultures (Datta and Puia, 1995; Weber et al., 1996; Krug and Hegarty, 1997; Schoenberg 2004).

While most of these models assume that cultural differences pose significant barriers to achieving integration benefits, it has also been suggested that cultural differences can be a source of capability development and value creation (Morosini et al., 1998). For example, Krishnan, Miller and Judge (1997) showed that the existence of complementary top management teams in the acquiring and acquired firm – that is, teams where members represent different functions – tends to be associated positively with post-acquisition performance. Larsson and Risberg (1998) found in their study that international acquisitions outperformed domestic ones, possibly because they tend to be associated with greater cultural awareness. In addition, Morosini et al. (1998) found that specific kinds of national cultural differences may in fact improve overall acquisition performance.

Such analyses have, however, been criticized lately. The use of simplistic ‘national cultural distance’ measures has been seen as inadequate (Harzing, 2004; Kirkman et al., 2006; Shenkar, 2001), in part because most studies have relied on data collected by Hofstede (1980) several decades ago. Moreover, it has been argued that many analyses have not given sufficient attention to other factors at play or to the context-specific features (Teerikangas and Very, 2006; Stahl and Voigt, 2005). While these criticisms should be taken seriously, they do not in our view mean that one should abandon the study of cultural differences altogether. Rather, the implication is that we need more elaborate analyses of the various processes and mechanisms involved.

It is therefore important to link this research stream with cultural approaches that concentrate on the dynamics of the integration processes. Drawing on anthropological research (Berry 1980), several studies have examined the acculturation process following a merger or an acquisition (Elsass and Veiga, 1994; Larsson and Lubatkin, 2001; Mirvis and Sales, 1990; Nahavandi and Malekzadeh, 1988; Sales and Mirvis, 1984). Scholars have, for example, examined how attractive the other organization is considered and what kind of integration approach is taken by the acquirer (Nahavandi and Malekzadeh, 1988). Veiga, Lubatkin, Calori and Very (2000) analyzed changes in cultural compatibility and found that post-merger performance was highest in cases where pre-merger cultural incompatibility turned into cultural compatibility after the merger – and lowest in cases where cultural compatibility turned into incompatibility. Larsson and Lubatkin (2001) pointed out that successful acculturation is possible even in conditions of significant cultural differences if the acquirer invests in formal and informal control.

Furthermore, drawing on constructionist perspectives on culture (Martin, 1992), some researchers have focused on the ‘constructed’ nature of cultural differences (Gertsen et
al., 1998; Kleppestø, 2005). From this perspective, the point is not to examine ‘objective’ cultural differences but rather to focus on subjective interpretations and how they link with sensemaking and organizational action. One reading of these studies is that they cast doubt on any ‘essentialist’ analysis of cultural differences. However, another interpretation is that these analyses indicate that the ways in which cultural differences impact integration process dynamics are complex and closely related to identity-building, sensemaking, and social conflict (Gertsen et al., 1998, Kleppestø, 2005). Recent analyses have indeed illustrated how post-acquisition cultural sensemaking involves national cultural stereotypes (Vaara, 2003) and nationalism (Vaara, Tienari, Piekkari and Säntti, 2005) that have a significant impact on the social dynamics in post-acquisition integration.

While the theoretical perspectives and empirical studies reviewed above have greatly increased our knowledge of the post-acquisition integration process, the fact remains that there is considerable ambiguity concerning the effects that cultural differences have on post-acquisition outcomes. In brief, most scholars assume that national and organizational cultural differences have a negative impact on post-acquisition performance. Some argue for a positive relationship, others suggest that pre-acquisition cultural differences per se are unlikely to have performance effects and instead focus more on process factors, while there are still others who question any ‘essentialist’ analysis of cultural differences. In our view, one key reason for this ambiguity is that we lack integrative models specifying the distinctive, possibly contradictory effects that both national and organizational cultural differences may have on post-acquisition integration performance. As a step in this direction, we will in the following outline a model that distinguishes specific mechanisms through which organizational and national cultural differences influence social conflict and knowledge transfers between the merging organizations.

National and organizational cultural differences as antecedents of social conflict and knowledge transfer

Culture has been conceptualized in a variety of ways in the management and organization literature. This is the case both with organizational (Hatch, 1993; Martin, Forst and O’Neill, 2006; Schein, 1985) and national cultures (Hofstede, 1980; Kirkman et al., 2006; House at al., 2004). In this paper, we adopt a ‘configurational’ perspective according to which multinational corporations (MNCs) are cultural systems where beliefs, values and practices form specific configurations in particular parts of the corporation (Björkman et al., 2007). This conceptualization of culture is consistent with Schein’s (1985) widely used model that distinguishes three levels of culture: artifacts (visible, tangible, audible results of activity grounded in values and assumptions), values (social principles, philosophies, goals and standards considered to have intrinsic worth), and basic assumptions (taken-for-granted beliefs concerning reality and human nature). It also coheres with Hofstede’s (1980) ideas about underlying worldviews that are manifested in a ‘collective programming of the mind’ as well as the multi-level concept of culture adopted by the GLOBE research program (House et al., 2004). However, we emphasize that MNCs and units within them involve various cultural facets and divisions, the relevance of which depends on the situation at hand. In
international acquisitions, national and organizational cultures are particularly central—but obviously not the only—cultural aspects. Accordingly, merging units can be seen as specific organizational configurations embedded in their particular national contexts.

In international acquisitions, the cultural differences—national and organizational—can create problems or lead to value creation. The starting point of our analysis is to assume that organizational cultural differences are at least to some extent embedded in the national cultural differences. However, while this relationship is crucial, the role of national cultural differences in post-acquisition integration should not be reduced to the effects on organizational cultural differences. On the contrary, it is important to outline a model that would allow us to distinguish the specific effects of national and organizational cultural differences on post-acquisition integration while controlling for their interplay.

In the following, we will focus on social conflict and knowledge transfer. Social conflict is conceptualized as inter-group tensions ranging from different opinions to mistrust and open conflict, thus covering several dimensions of organizational conflicts (Jehn, 1997). This view has its roots in both the literature on social identity building (Ashforth and Mael, 1989; Hogg and Terry, 2000; Tajfel and Turner, 1979) and in analyses of organizational cultures (Martin et al., 2006; Sackmann, 1992). A central argument in both literatures is that people tend to associate similarity concerning beliefs and values with attractiveness and trustworthiness. This is the case whether these differences are ‘real’ or more stereotypical conceptions that do not necessarily correspond to organizational reality. This association often results in the development of in-group versus out-group bias and subsequent cooperation problems and more or less overt conflicts. Consistent with this reasoning, research on organizational trust has shown that trust in a person or group tends to be greater when the two are culturally similar (McAllister, 1995; Sitkin and Roth, 1993). In an international acquisition, where two organizations with different cultures are combined, in-group versus out-group biases are likely to be accentuated (Elsass and Veiga, 1994; Gaertner, Bachman, Dovidio and Banker, 2001; Terry, 2001; van Knippenberg and van Leeuwen, 2001; Kleppestø, 2005). Therefore, we propose the following hypothesis:

**HYPOTHESIS 1A.** The greater the national cultural differences between the acquiring and the acquired firms, the higher the degree of social conflict.

As post-merger or post-acquisition organizational decision-making processes often deal with issues of fundamental importance for the actors involved, organizational divisions tend to strengthen and lead to covert or overt political struggles between the people representing the two organizational sides (Cartwright and Cooper, 1992; Sales and Mirvis, 1984; Schweiger and Goulet, 2000; Vaara, 2003). Social conflicts are likely to emerge in settings of significant organizational cultural differences. In our view this may be a primary explanation for the frequent findings reporting a negative effect of organizational cultural differences on post-acquisition performance (Chatterjee et al., 1992; Datta, 1991). This leads us to propose the following:

**HYPOTHESIS 1B.** The greater the organizational cultural differences between the acquiring and acquired firms, the higher the degree of social conflict.
Cultural differences can also be linked to value creation. One of the most central value creation mechanisms in acquisitions is knowledge transfer (Haspeslagh and Jemison, 1991; Bresman, Birkinshaw and Nobel, 1999). According to Haspeslagh and Jemison (1991), the *raison d’être* of related-business acquisitions is to improve the competitive position of one or both of the firms by the transfer of complementary capabilities between them. Such knowledge transfer may involve transfer of knowledge from the acquirer to the acquired company, but it can also involve a transfer where the specific knowledge or capabilities of the acquired organization are used in particular parts of the acquiring corporation. In this paper, we conceptualize knowledge transfer as the process through which various types of knowledge, capabilities or skills originally residing in one organization are beneficially utilized in the other. Hence, following the perspective taken in most studies in this area (Bresman *et al.*, 1999; Zander, 1991), knowledge transfer here means successful knowledge transfer. Knowledge transfer can include many things ranging from specific resource deployment to more active development of specific capabilities on the basis of knowledge transfer (Bresman *et al.*, 1999; Haspeslagh and Jemison, 1991).

Cultural differences are potential sources of complementary knowledge and capabilities. These differences can thus be seen as part of the complementary combination potential in mergers and acquisitions. Larsson and Finkelstein (1999) call these benefits ‘economies of fitness’ to distinguish them from the more traditional ‘economies of sameness’ (accumulating similar operations). This complementary knowledge can be rooted in the cultural and institutional context of the organizations (Bresman *et al.*, 1999; Morosini *et al.*, 1998). For example, Morosini, *et al.* (1998) argue that a greater national cultural distance makes it more likely that the target firm will have knowledge and capabilities that are different from the acquirer’s own set; *ceteris paribus* complementarities are more likely to exist. This is also in line with contemporary theorizing about the MNC, which focuses on how the corporation through its differentiated international operations can get access to diverse and complementary knowledge that can transferred and recombined more efficiently internally than through the market (Kogut and Zander, 1993). Thus, the complementary potential that resides in the different national cultures can provide possibilities for knowledge transfers and value creating in post-acquisition integration processes. We assume that this complementary potential will have a stronger impact on the propensity to transfer knowledge during the integration process than the possible increase in barriers to transferring knowledge – or ‘stickiness’ (Szulanski, 1996) – when the cultural distance between the parties increase (Cho and Lee, 2004). In other words, the higher potential for complementary knowledge associated with a greater national cultural distance between the acquirer and acquired units is likely to have a more significant impact on knowledge transfers than the possible increase in stickiness. This leads us to hypothesize that:

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93 In previous studies, organizational knowledge has been divided in know-how and information (Zander and Kogut, 1995). Following previous studies (Gupta and Govindarajan, 2000), we focus on the know-how dimension because of its importance for the competitive advantage for firms. Although information has to be transferred extensively across units in different countries, the mere transfer of information does not equal knowledge transfer.

94 Our perspective is thus broad, although one could arguably make a distinction between ‘knowledge transfer’ and ‘knowledge creation’ (e.g., Grant 1996, Szulanski 1996, Zander and Kogut, 1995).
**HYPOTHESIS 2A.** The greater the national cultural differences between the acquiring and the acquired firms, the higher the level of knowledge transfer.

However, specific organizational cultural differences can also be the sources of knowledge transfer (Bresman et al., 1999; Capron, Dussage and Mitchell, 1998; Ranft and Lord, 2002). According to this logic, the greater differences in organizational practices (e.g., in sales & marketing, production, R&D, or general management) provide more possibilities for transfer of knowledge than situations where organizations with very similar practices are combined. Therefore, we hypothesize that:

**HYPOTHESIS 2B.** The greater the organizational differences in between the acquiring and the acquired firms, the higher the level of knowledge transfer.

**The mediating role of operational integration**

Various integration frameworks have been offered in the mergers and acquisitions literature (Birkinshaw, Bresman and Håkanson, 2000; Haspeslagh and Jemison, 1991; Hunt, 1990; Marks and Mirvis, 1998; Nahavandi and Malekzadeh, 1988; Pablo, 1994; Pitkethly, Faulkner and Child, 2003; Shrivastava, 1986). These frameworks propose different integration approaches that vary in the attempted level of integration. Post-acquisition integration levels for different companies, divisions, or subunit can range from total autonomy to total absorption. Related acquisitions usually involve some degree of operational integration – what Shrivastava (1986) labels procedural and physical integration – as gauged by the extent to which the acquirer standardizes work procedures and systems, and removes overlapping operations.

We expect knowledge transfer to increase with the level of operational integration. First, during the process of operational integration, there will be extensive opportunities for people from the two organizations to interact and thus detect opportunities for transfers and recombinations of the different sets of knowledge residing in the two units (Ranft and Lord 2002). Second, the more the two units develop standardized procedures and practices, the easier it will be for the receiving unit to see the value and acquire the knowledge residing in the other organization, assimilate it to its own unit, and transform and exploit it in its own operations (Gupta and Govindarajan 2000, Zollo and Singh 2004). This suggests that:

**HYPOTHESIS 3.** The higher the level of operational integration, the higher the level of knowledge transfer.

However, operational integration may also lead to social conflict. First, the decisions and actions concerning standardization and integration of structures and processes are often interpreted as a threat to or a disregard of the culture and identity of the focal organization (Buono and Bowditch, 1989, Cartwright and Cooper, 1992, 1993; Olie, 1994). Second, a loss of autonomy is a key concern for the people in acquired organizations (Haspeslagh and Jemison, 1991; Nahavandi and Malekzadeh 1988). In the worst cases, these concerns are reflected in high levels of employee resistance (Larsson and Finkelstein, 1999) or management turnover (Hambrick and Cannella, 1993). While Marks and Mirvis (1986: 41) described these kinds of overall problems as the “merger syndrome,” Datta and Grant (1990: 32) specifically talked about the “conquering army
syndrome.” In summary, and while in certain takeover situations autonomy may not be so important and people in the acquired organization may sometimes favour ‘hands-on’ approaches by the acquirer (Hespleslagh and Jemison, 1991; Nahavandi and Malekzadeh, 1988), and a high level of operational integration in the long run might help reduce uncertainty, tight post-acquisition operational integration is likely to be associated with more social conflict during the integration process. The foregoing discussion suggests the following hypothesis:

**HYPOTHESIS 4.** The higher the level of operational integration, the higher the level of social conflict.

Cultural differences can also affect operational integration efforts. One can assume that in situations characterized by greater cultural differences, there is a special need to invest in operational integration. This is because more efforts are required to integrate the organizations, especially to reap benefits coming from knowledge transfer or other forms of synergy. Further, the larger the cultural distance between the units, the more difficult it will be for the top management of the acquirer to control and coordinate the operations of the acquired unit (Roth and O'Donnell, 1996). Hence, one would anticipate more operational integration efforts in cases of national or organizational differences. One might also argue that in situations characterized by large cultural distance, managers would sometimes refrain from drastic measures precisely because of the anticipated problems related to social conflict. We, however, expect that the need for integration constituted by cultural differences would outweigh such tendencies. Therefore, we hypothesize that on average greater cultural differences would lead to more operational integration efforts:

**HYPOTHESIS 5a.** The greater the national cultural differences, the higher the level of operational integration.

**HYPOTHESIS 5b.** The greater the organizational cultural differences, the higher the level of operational integration.

**The impact of social conflict on knowledge transfer**

While we have argued that social conflict and knowledge transfer are conceptually distinct, they are not independent of one another. Knowledge transfer takes place only if individuals are prepared to share and exchange knowledge (Gupta and Govindarajan, 2000; Szulanski, 1996). A number of studies indicate that social cohesion is an important predictor of resource sharing and transfer across units within multinational corporations (Bartlett and Ghoshal, 1989; Hedlund, 1986; Nahapiet and Ghoshal, 1998; Schultz, 2003; Szulanski, 1996).

In the context of acquisitions, the importance of social integration for knowledge transfer is especially salient. On the one hand, knowledge transfer requires constant open-minded social interaction, which rests on a sense of social cohesion and trust (Bresman et al., 1999, Hespleslagh and Jemison, 1991). As Bresman et al. (1999: 442) noted in their study of knowledge transfer following international acquisitions, “individuals will only participate willingly in knowledge exchange once they share a sense of identity or belonging with their colleagues.” On the other hand, mistrust,
conflicting views, and organizational politics can be seen as major obstacles for such efforts (Empson, 2001; Vaara, 2003). For example, Empson (2001) has illustrated how fears of exploitation (being used and losing one’s own culture and identity) and contamination (being changed in ways that threaten one’s culture and identity) impede successful post-acquisition knowledge transfer. Therefore, we hypothesize:

**HYPOTHESIS 6.** The greater the level of social conflict, the lower the level of knowledge transfer.

The hypotheses are summarized in Figure 1.

**Figure 1 Proposed model**

![Proposed Model Diagram](image)

**EMPIRICAL ANALYSIS**

**Sample and procedures**

In this paper, we analyze foreign acquisitions carried out by Finnish corporations. The data are based on the national cultural difference scores of the GLOBE project (House et al. 2004) and our database on Finnish corporate acquisitions. This database consists of data collected through three mail surveys, the first covering the period of 1993-1996, the second survey the period of 1997-2000, and the third survey the period of 2001-2004. For a detailed discussion on these data collection rounds, sampling criteria, questionnaire design, and resulting samples, please see earlier sections 4.1.1-4.1.5.

The three surveys resulted in a total number of 133 foreign acquisitions. On average, we received 1.65 answers per acquisition resulting in a database of 220 answers. Of the
answers, 70% were received from the acquirer side and 30% from the acquired firm side and 57 answers were received from acquisitions in Sweden, 35 from Germany, 18 from Switzerland, 18 from the USA, 14 from Estonia, 14 from Poland, 11 from Great Britain, 10 from Norway, 9 from Canada, 6 from France, 5 from Denmark, 5 from South Africa, 4 from Belgium, 3 from the Netherlands, 3 from Russia, 2 from Hungary, 2 from Italy and 1 answer each from Australia, Austria, Brasilia, China, Columbia, South Korea, Lithuania and Romania. Unfortunately, Estonia, Belgium, Lithuania and Latvia do not have GLOBE scores.

Measures

Table 1 reports the variable means, standard deviations and correlation coefficients between the variables used in the study. With the exception of the measure for national cultural differences and control variables, the constructs were based on the respondents’ answers on multiple item seven-point Likert-type scale questions.

National cultural differences. We measured national cultural distance by using the GLOBE practices scores (House et al., 2004). National cultural distance measures utilizing Hofstede’s (1980) scores have been widely criticized (Harzing, 2004; Shenkar, 2001). This is why the GLOBE project attempted to create elaborate and reliable national cultural differences scores. As opposed to Hofstede’s four dimensions (uncertainty avoidance, power distance, individualism) and later fifth dimension (long-term orientation), the GLOBE scores have nine cultural dimensions: assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, power distance, and uncertainty avoidance. The GLOBE study reports national scores on both organizational practices and values (House et al., 2004). We used the practices scores because they indicate actual rather than ideal differences between countries.\(^{95}\) In the absence of existing theorizing that would help us conclude which cultural are particularly relevant for social conflicts and knowledge transfer, we used the nine dimensions of GLOBE practices score to build an index of national cultural differences using the technique developed by Kogut and Singh (1988) that was used by Morosini et al. (1998) (who used Hofstede’s data). Our index of national cultural differences represented the aggregate national cultural distance between the acquirer and the acquiree:

\[
CD_j = \frac{1}{9} \sum_{i=1}^{9} \left( I_{ij} - I_{ij} \right)^2
\]

Where:

- \( CD_j \): The cultural difference for the \( j \):th country
- \( I_{ij} \): Globe score for \( i \):th cultural dimension and \( j \):th country
- \( F_j \): Indicates Finland

\(^{95}\) The statistical tests further supported this choice by showing that practices scores measuring actual differences correlated more strongly with post-acquisition integration outcomes than value scores measuring ideal differences.
<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tbody>
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<td>1 Knowledge transfer in management &amp; control</td>
<td>4.62</td>
<td>1.51</td>
<td>1</td>
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<td></td>
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<tr>
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<td>0.52***</td>
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<td>-0.19**</td>
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<td>-0.17+</td>
<td>-0.10</td>
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<td>-0.15+</td>
<td>-0.1</td>
<td>-0.12</td>
<td>-0.11</td>
<td>0.55***</td>
<td>0.61***</td>
<td>0.70***</td>
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<td>1.07</td>
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<td>0.10</td>
<td>0.04</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.32***</td>
<td>0.27***</td>
<td>0.18**</td>
<td>0.16+</td>
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<td>1.26</td>
<td>0.08</td>
<td>0.06</td>
<td>0.21**</td>
<td>0.07</td>
<td>0.01</td>
<td>0.24***</td>
<td>0.22**</td>
<td>0.16+</td>
<td>0.23**</td>
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<td>0.09</td>
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<td>0.18**</td>
<td>0.08</td>
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<td>0.18+</td>
<td>0.1</td>
<td>0.08</td>
<td>0.21**</td>
</tr>
<tr>
<td>13 Cultural differences in R&amp;D</td>
<td>4.61</td>
<td>1.46</td>
<td>-0.03</td>
<td>0.03</td>
<td>0.15+</td>
<td>0.08</td>
<td>0.03</td>
<td>0.16+</td>
<td>0.18+</td>
<td>0.14+</td>
<td>0.20**</td>
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<td>0.14+</td>
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<td>0.07</td>
<td>0.02</td>
<td>0.27***</td>
<td>0.09</td>
<td>0.08</td>
<td>0.04</td>
<td>0.04</td>
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<td>0.15+</td>
<td>0.05</td>
<td>0.07</td>
<td>0.27***</td>
<td>0.25***</td>
<td>0.19**</td>
<td>0.19**</td>
</tr>
<tr>
<td>16 Cultural differences in values of key decision makers</td>
<td>4.93</td>
<td>1.21</td>
<td>0.06</td>
<td>0.22**</td>
<td>0.17+</td>
<td>0.08</td>
<td>0.15+</td>
<td>0.30***</td>
<td>0.29***</td>
<td>0.23**</td>
<td>0.12+</td>
</tr>
<tr>
<td>17 Elimination of overlappings</td>
<td>3.83</td>
<td>1.75</td>
<td>0.13+</td>
<td>0.17+</td>
<td>0.16+</td>
<td>0.22**</td>
<td>0.16+</td>
<td>-0.00</td>
<td>-0.06</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>18 Standardization of practices</td>
<td>4.79</td>
<td>1.27</td>
<td>0.17+</td>
<td>0.28***</td>
<td>0.26***</td>
<td>0.13+</td>
<td>0.16+</td>
<td>-0.02</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.04</td>
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<tr>
<td>19 Decisions based on maximization of synergies</td>
<td>4.71</td>
<td>1.35</td>
<td>0.09</td>
<td>0.17+</td>
<td>0.23**</td>
<td>0.16+</td>
<td>0.06</td>
<td>0.01</td>
<td>0.1</td>
<td>-0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>20 National cultural differences</td>
<td>0.49</td>
<td>0.15</td>
<td>0.14+</td>
<td>0.26***</td>
<td>0.31***</td>
<td>0.17+</td>
<td>0.15+</td>
<td>-0.15+</td>
<td>-0.15+</td>
<td>-0.19**</td>
<td>-0.11</td>
</tr>
<tr>
<td>21 Size of the acquired firm (millions of EUR)</td>
<td>99.34</td>
<td>229.99</td>
<td>0.04</td>
<td>-0.12+</td>
<td>-0.07+</td>
<td>-0.06</td>
<td>-0.10</td>
<td>0.13</td>
<td>-0.01</td>
<td>-0.03</td>
<td>-0.09</td>
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<tr>
<td>22 Time elapsed</td>
<td>1.35</td>
<td>1.04</td>
<td>0.08</td>
<td>0.03</td>
<td>0.04</td>
<td>0.13+</td>
<td>0.03</td>
<td>-0.02</td>
<td>-0.10</td>
<td>-0.11</td>
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</tr>
<tr>
<td>23 Service industry</td>
<td>0.01</td>
<td>0.12</td>
<td>0.09</td>
<td>-0.02</td>
<td>-0.05</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.11</td>
<td>0.05</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>24 Respondent status (acquirer vs. acquired)</td>
<td>0.29</td>
<td>0.46</td>
<td>-0.09</td>
<td>-0.21**</td>
<td>-0.10</td>
<td>-0.06</td>
<td>-0.10</td>
<td>-0.13+</td>
<td>-0.16+</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

***p < 0.001, **p < 0.01, *p < 0.05, +p < 0.10, two-tailed tests

Table 1 Means, standard deviations, and correlations for the latent variables in the model
Table 1 Continued. Means, standard deviations, and correlations for the latent variables in the model
By using GLOBE scores from a source external to the sample we avoided the problem of common method variance caused by the same individuals answering questions about national culture in the same way as they answer questions about social conflict or knowledge transfer. In addition, we could thus deal with retrospective rationalizing concerning national cultural differences (Golden, 1992; Huber and Power, 1985). A further strength of using the GLOBE measures is that the data collected for the GLOBE study overlaps with the time period covered in our research.

**Organizational cultural differences.** Following the example of previous studies (Chatterjee et al., 1992; Lubatkin et al., 1999; Weber, 1996; Weber et al., 1996), we used direct questions concerning the perceived cultural differences that existed before the acquisition as reported by top managers. According to Chatterjee et al. (1992), assessing perceptions of cultural differences rather than examining the more tangible and objective outcomes of culture such as reward structures or mission statements is advantageous because perceptions are likely to be better predictors of behavior. Elsass and Veiga (1994) also suggest that perceived cultural differences are important because the more dissimilar the out-groups are perceived to be, the more strongly the negative feelings in-group members are likely to hold.

We asked managers to describe the extent of cultural differences across key organizational functions. These included management and control, sales and marketing, production, research and development, and finance. In addition, we asked managers to describe differences in company values in general and differences in the values of key decision makers. This approach involved managers retrospectively evaluating the organizational cultural differences prior to the acquisition between the acquiring and the acquired firms. It can be argued that the differences should be measured at the time the acquisition is completed. However, gaining access to the firms at that time is extremely difficult. We also maintain that managers are able to reasonably recall the pre-acquisition situations because acquisitions have the affect of sharpening rather than dulling memory. Furthermore, learning about actual organizational cultural differences as opposed to stereotypical assumptions takes time, which suggests that the assessment should take place after real experiences of the integration efforts. In the questionnaire, we included a set of questions about cultural differences at the time of the survey to control whether managers were able to distinguish between cultural differences at the time of the acquisition and at the time of the survey. When we compared answers to the questions of cultural differences prior to the acquisition and cultural differences at the time of the survey, we found significant differences. Therefore, we have reason to believe that managers were able to distinguish between prior organizational cultural differences and current organizational cultural differences.

**Operational integration.** Adapting the items used in previous studies (Krishnan and Park, 2003; Larsson and Lubatkin, 2001; Lubatkin et al., 1998; Morosini and Singh, 1994; Weber et al., 1996), our operational integration construct is based on targeted questions measuring the level of operational integration activities. The respondents were asked about the extent to which (i) overlappings between the units had been eliminated, (ii) there was a tendency to standardize practices, and (iii) integration decisions were aimed at the realization of synergy, e.g., through cost reduction.
Social conflict. In accordance with studies on social identity building (van Knippenberg and van Leeuwen, 2001; Pratt, 2001; Terry, 2001) social conflict was measured by four questions on inter-group tensions covering different dimensions of organizational conflicts (Jehn, 1997). We constructed this composite measure of social conflict from the respondents’ answers to questions concerning the extent of different opinions, cooperation problems, conflicts, and mistrust between the merger partners.

Knowledge transfer. In the measurement of knowledge transfer construct, we followed the example of previous studies on organizational knowledge transfer in general (Zander, 1991) and in acquisitions in particular (Bresman et al., 1999; Capron et al., 1998). Our knowledge transfer construct was measured by five questions concerning the extent to which knowledge transfer had resulted in benefits across the following organizational functions: management and control, sales and marketing, production, research and development, and finance.

Control variables

Size. Following previous studies (e.g. Halebian and Finkelstein, 1999; Kusewitt, 1985; Larsson and Finkelstein, 1999; Morosini et al., 1998), we controlled for the size of the acquisition. We measured this as the turnover by the acquired company at the time of acquisition using external data from the database of the financial magazine Talouselämä.

Time elapsed. Time elapsed since acquisition could impact the outcome of acquisitions and the perceptions of the respondents (Greenwood, Hinnings and Brown, 1994; Very et al., 1997). Bresman et al. (1999) found empirical evidence that knowledge transfer in acquisitions was positively related to time elapsed since acquisition. Given that our data were collected from 1 to 3 years after acquisition, we controlled for the possible temporal variance by recording the age of the merger as the number of years (1, 2, or 3) which transpired from the time of the merger to the time that we received the completed questionnaire (Very et al., 1997). We used external data from the database of the financial magazine Talouselämä.

Industry type. Among others, Morosini et al. (1998) suggest that industry type might impact post-acquisition integration due to differences reported in the preference of acquisitions as an entry mode (Kogut & Singh, 1998). We controlled for sectoral effects by using a dummy variable to indicate whether the acquisition was in service industry (1= service industry, 0=others) using external data from the database of the financial magazine Talouselämä.

Respondent. As our sample included responses from both the acquiring and the acquiring firms side, we controlled the respondent status by using a dummy variable (1=acquiring firm, 0=acquired firm).

Structural equation analysis

We tested our propositions using structural equation modeling (Byrne 2001). Before entering the variables into the model, we adjusted the data to assure homoscedasticity by weighting each observation by the constant $1/\sqrt{n}$, which guaranteed the equality of
variance between single and multiple response cases. In addition, we standardized all variables.

We used the AMOS 7.0 program with covariance matrix as input and maximum likelihood as estimation method and followed the two-stage procedure recommended by Anderson and Gerbing (1988). The first stage involved estimating the measurement model using confirmatory factor analysis in order to test whether the constructs exhibited sufficient unidimensionality, validity and reliability. The second stage identified the structural model and tested the hypothesized relationships between the constructs. We used maximum likelihood estimation.

Results of the measurement model

Tables 2 and 3 summarize the results of the measurement model. Overall, the measurement model performed well with comparative fit index (CFI) at 0.922, DELTA 2 index at 0.923, TLI at 0.893, and RMSEA at 0.083. We examined the estimated loadings and their significance levels. The loadings for all measurements beta were significant at \( p < 0.001 \) level.

Typically, researchers have used the mean scores of multiple respondents to represent an acquisition or a top management team in an acquisition. However, for the purposes of structural equation modeling, the use of mean scores for multiple response cases is problematic because mean scores lead to an unequal variance between the cases that have a single respondent compared with those that have multiple respondents. Therefore, in order to fulfill the assumption of homoscedasticity, i.e. the equality of variance, we weighted each observation by a constant \( \frac{1}{\sqrt{n}} \).

The constant is derived from a basic variance formula, \( \text{var}(ax) = a^2 \times \text{var}(x) \). By using this formula, we can show that the constant for which the variance of mean is equal to the variance of a single observation (e.g. \( \text{var} \left( \frac{1}{\sqrt{n}} \times \bar{x} \right) = \text{var} \)), is \( \sqrt{n} \). Multiplying the mean by the constant \( \sqrt{n} \) equals multiplying each case by the constant \( \frac{1}{\sqrt{n}} \) as shown below:

\[
\text{var} \left( \frac{\sqrt{n} \times \bar{x}}{\sqrt{n}} \right) = \text{var} \left( \frac{\sqrt{n} \times \frac{\sum x}{n}}{\sqrt{n}} \right) = \text{var} \left( \frac{1}{\sqrt{n}} \times \sum x \right) = \text{var} \left( \frac{1}{\sqrt{n}} \times x_1 + \frac{1}{\sqrt{n}} \times x_2 \ldots \right).
\]

(Hair, Anderson, Tatham and Black, 1998; Milton and Arnold, 2002; Sanders and Smidt, 2000)

In the presence of incomplete data, ML estimation offers several advantages over both the listwise and pairwise deletion approaches (Arbuckle, 1996; Byrne, 2001). For example, when the unobserved values are missing completely at random, listwise estimates are consistent, but not efficient, whereas ML estimates are both consistent and efficient. Also, when the unobserved values are only missing at random, both listwise and pairwise estimates can be biased but ML estimates are asymptotically unbiased. In addition, ML estimation produces standard error estimates and provides a method for testing hypotheses, unlike pairwise estimation. Finally, when missing values are nonignorable, all procedures can yield biased results but compared with listwise and pairwise deletion approaches, ML estimates exhibit the least bias (Little and Rubin, 1989). For a discussion on ML estimation, see Arbuckle (1996).
## Table 2  Results of the measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measurement item</th>
<th>Unstandardized beta coefficient</th>
<th>Z-statistic</th>
<th>Standardized regression weight</th>
<th>Indicator reliability</th>
<th>Error variance</th>
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<tbody>
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<td><strong>Organizational cultural differences</strong></td>
<td>Management and control</td>
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<td>21.37</td>
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<td></td>
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<td>0.79</td>
<td>0.62</td>
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<td>Production</td>
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<td>0.61</td>
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<td>Finance</td>
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<td>Different opinions</td>
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<td>0.86</td>
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<td>16.46</td>
<td>0.81</td>
<td>0.66</td>
<td>0.34</td>
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<td>Mistrust between the employees</td>
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<td>0.74</td>
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<td>0.45</td>
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<td>Sales and marketing</td>
<td>0.96***</td>
<td>14.68</td>
<td>0.78</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>0.89***</td>
<td>14.79</td>
<td>0.78</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Research and development</td>
<td>0.85***</td>
<td>14.79</td>
<td>0.78</td>
<td>0.61</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>1.06***</td>
<td>17.56</td>
<td>0.85</td>
<td>0.72</td>
<td>0.28</td>
</tr>
</tbody>
</table>

***p <0.001
While there is no simple overall yardstick to evaluate the measurement model, there are useful indicators (Boomsma, 2000; Hu and Bentler, 1999; Marsh, Hau and Wen, 2004). Shook, Ketchen, Hult and Kachmar (2004) recommend calculating composite reliability, which draws on the standardized loadings and measurement error for each item. According to Fornell and Larcker (1981), 0.70 is an acceptable minimum level for composite reliability, with each indicator reliability above 0.50. In our model, composite reliabilities ranged from 0.87 to 0.95 with indicator reliabilities above 0.50, which suggested good reliability for our measures. Another test for convergent validity is average variance. Shook et al. (2004) suggest that convergent validity is achieved when the average variance extracted is above 50%. The average variances in our model ranged from 69% to 73%, which suggested good convergent validity. We tested discriminant validity by conducting pairwise tests of all theoretically related constructs (Anderson 1987). The pairwise tests showed that confirmatory factor analysis model representing two measures with two factors fit the data significantly better than a one-factor model, which supported the discriminant validity of the model. Overall, the results indicated that our constructs were adequate to proceed to the second stage of structural equation modeling.

### Table 3 Construct validity and reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite reliability</th>
<th>Average variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational cultural differences</td>
<td>0.95</td>
<td>0.73</td>
</tr>
<tr>
<td>Operational integration</td>
<td>0.87</td>
<td>0.69</td>
</tr>
<tr>
<td>Social conflict</td>
<td>0.91</td>
<td>0.72</td>
</tr>
<tr>
<td>Knowledge transfer</td>
<td>0.92</td>
<td>0.69</td>
</tr>
</tbody>
</table>

### Results of the structural model

Table 4 presents the standardized parameter coefficients and their Z-statistics for the hypothesized path model.

Hypothesis 1a suggested that national cultural differences are positively associated with social conflict. The relationship was significant but – interestingly enough – in the opposite direction than hypothesized as indicated by a negative and statistically significant beta estimate (b = -0.27, p < 0.001). In other words, national cultural differences were associated with less rather than more social conflicts between the parties. Hypothesis 1b proposed that organizational cultural differences are associated with greater level of social conflict. The results offered clear support for this hypothesis, indicated by a significant beta estimate (b = 0.96, p < 0.001). Hypothesis 2a, suggesting a positive relationship between national cultural differences and knowledge transfer, was supported by the data (b = 0.16, p < 0.01). The hypothesized positive relationship between the organizational cultural differences and knowledge transfer was also supported by the data (b = 0.53, p < 0.001), rendering support to hypothesis 2b.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description of path</th>
<th>Hypothesized direction</th>
<th>Unstandardized beta coefficient</th>
<th>Z-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>National cultural differences -&gt; Social conflict</td>
<td>+</td>
<td>-0.27***</td>
<td>-3.33</td>
</tr>
<tr>
<td>H1b</td>
<td>Organizational cultural differences -&gt; Social conflict</td>
<td>+</td>
<td>0.96***</td>
<td>7.57</td>
</tr>
<tr>
<td>H2a</td>
<td>National cultural differences -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.16**</td>
<td>2.63</td>
</tr>
<tr>
<td>H2b</td>
<td>Organizational cultural differences -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.53***</td>
<td>4.55</td>
</tr>
<tr>
<td>H3</td>
<td>Operational integration -&gt; Social conflict</td>
<td>+</td>
<td>-0.07</td>
<td>-0.55</td>
</tr>
<tr>
<td>H4</td>
<td>Operational integration -&gt; Knowledge transfer</td>
<td>+</td>
<td>0.44***</td>
<td>4.58</td>
</tr>
<tr>
<td>H5a</td>
<td>National cultural differences -&gt; Operational integration</td>
<td>+</td>
<td>0.13+</td>
<td>1.96</td>
</tr>
<tr>
<td>H5b</td>
<td>Organizational cultural differences -&gt; Operational integration</td>
<td>+</td>
<td>0.75***</td>
<td>9.05</td>
</tr>
<tr>
<td>H6</td>
<td>Social conflict -&gt; Knowledge transfer</td>
<td>-</td>
<td>-0.27***</td>
<td>-4.22</td>
</tr>
<tr>
<td>Control</td>
<td>National cultural differences -&gt; Organizational cultural differences</td>
<td></td>
<td>0.71***</td>
<td>13.46</td>
</tr>
<tr>
<td>Control</td>
<td>Size of the acquired firm -&gt; Knowledge transfer</td>
<td></td>
<td>-0.04</td>
<td>-1.15</td>
</tr>
<tr>
<td>Control</td>
<td>Time elapsed -&gt; Knowledge transfer</td>
<td></td>
<td>0.07+</td>
<td>1.93</td>
</tr>
<tr>
<td>Control</td>
<td>Service industry -&gt; Knowledge transfer</td>
<td></td>
<td>0.05</td>
<td>1.38</td>
</tr>
<tr>
<td>Control</td>
<td>Respondent status (acquirer vs. acquired) -&gt; Knowledge transfer</td>
<td></td>
<td>-0.03</td>
<td>-0.91</td>
</tr>
</tbody>
</table>

***p < 0.001, **p < 0.01, *p < 0.05, +p < 0.10

Table 4 Results of the structural model
In hypothesis 3, we proposed that the greater the operational integration, the higher the level of social conflict. The results indicate no empirical support for this hypothesis \((b = -0.07, \text{ non significant})\). According to hypothesis 4, the greater the level of operational integration the higher the level of knowledge transfer between the acquiring and acquired units. The standardized parameter estimate was positive and highly significant \((b = 0.44, p < 0.001)\), therefore supporting hypothesis 4. Hypothesis 5a proposed that the greater the national cultural differences, the higher the level of operational integration. We found only weak support for this hypothesis \((b = 0.13, p < 0.10)\). In a similar vein, hypothesis 5b suggested that the greater the level of organizational cultural differences, the higher the level of operational integration. The results offered strong support for hypothesis 5b \((b = 0.75, p < 0.001)\). Finally, we found clear support for hypothesis 6, which suggested that the greater the level of social conflict, the lower the level of knowledge transfer \((b = -0.27, p < 0.001)\).

We controlled for the relationship between national cultural differences and organizational cultural differences. The model suggested that a strong relationship existed between national cultural differences and organizational cultural differences \((b = 0.69, p < 0.001)\). The results concerning specific control variables suggested that time elapsed since the acquisition was positively related to knowledge transfer \((b = 0.07, p < 0.10)\). We also controlled for the effect of size of the acquired firm, service industry and respondent status (whether the respondent represented the acquiring or the acquired firm side) on knowledge transfer, but none of the relationships were statistically significant.

Our hypotheses tested linear relationships. However, it has been argued (Björkman et al., 2007) that the effects of cultural differences might be positive for mid-range values while negative for upper-range values. Therefore, we conducted additional regression analyses that included both first order and second order terms of national and organizational cultural differences. None of the second order terms were significant when either social conflict or knowledge transfer was used as a dependent variable. This suggested that no curvilinear effects were present concerning hypotheses 1a, 1b, 2a and 2b.

**DISCUSSION**

While existing research on mergers and acquisitions has pointed to the key role that cultural differences play in post-acquisition integration, these studies have produced mixed results as to the relationship between national and organizational cultural differences and post-acquisition outcomes (Chatterjee et al., 1992; Datta, 1991; Krishnan et al., 1997; Lubatkin et al., 1999; Morosini et al., 1998; Veiga et al., 2000; Weber, 1996; Weber et al., 1996). To partially explain these contradictory findings, we developed and empirically tested a model which specifies which mechanisms through national and organizational cultural differences affect post-acquisition dynamics. Figure 2 summarizes the findings.

We hypothesized that cultural differences tend to increase social conflict. Our results show that while organizational cultural differences increase social conflict, national cultural differences tend to reduce such conflict. This negative relationship was unexpected, but it
may be explained by the fact that we included organizational cultural differences in our model. We think that concrete organizational cultural differences in specific beliefs, values and practices are often linked with actual conflicts of interests (related to standardization, overlapping operations, etc.) and divergent views on what should be the integration strategy (concerning overlapping operations, layoffs, etc.). Such differences can be seen as root causes of social conflict, and this may help to explain why numerous studies have reported a negative relationship between cultural differences and post-acquisition performance (Chatterjee et al., 1992; Datta, 1991; Lubatkin et al., 1999; Weber, 1996; Weber et al., 1996). This effect of organizational cultural differences does not in itself explain why national cultural differences would alleviate conflicts as seems to be the case in our data. However, it is likely that people pay more attention to and make special efforts to address cultural differences when these are apparent as is the case with apparent national cultural differences. In this way, a large national cultural distance between the acquirer and the acquired units may actually help in preparing for and dealing with potential conflict situations. This view is consistent with studies pointing to a ‘Psychic Distance Paradox’ (O’Grady and Lane, 1996) in international business.

**Figure 2 Illustration of results**

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This is a simplified version of the actual model. It does not show error terms, or the indicator variables of the latent constructs or the control variables. We added an error term to each of the endogenous variables to account for the variance that was not explained by the observed exogenous variables. To enable model
We also hypothesized that cultural differences would have a positive impact on knowledge transfer by providing potential combinatorial synergies as well as learning opportunities. Here we found strong evidence for the positive impact of both national and organizational cultural differences on knowledge transfer. These results support the view that concrete potential for complementarity residing in organizational beliefs, values and practices seem to drive knowledge transfer in post-acquisition settings. Furthermore, the different national contexts – reflected in national cultural differences – can provide special learning opportunities per se. This is indeed what theories on international or cross-cultural management indicate. In all, we believe that these are two key mechanisms behind the results of those studies reporting a positive effect of cultural differences on post-acquisition performance (Larsson and Risberg, 1998; Morosini et al., 1998). The fact that the added complementarities were of greater importance for knowledge transfer than the potential stickiness (Szulanski, 1996) that may be associated with knowledge transfer between culturally distant units (Cho and Lee, 2004), is also an important finding.

We further examined operational integration, hypothesizing that the degree of operational integration has a positive effect on knowledge transfer but also increases social conflict. Our results show that operational integration has a strong positive impact on knowledge transfer, suggesting that at least a moderate level of integration is a prerequisite for realizing synergies in related acquisitions, which is consistent with the previous analyses (Haspeslagh and Jemison, 1991). In contrast, the hypothesis that operational integration tends to increase social conflict was not supported. One possible explanation for this is that without clear-cut decisions, many of the organizational conflicts can remain unresolved and continue to undermine social cohesion. For example, it has been observed that hesitation in approaching integration and lack of decisive action can generate suspicion and mistrust after corporate takeovers (Buono and Bowditch, 1989; Haspeslagh and Jemison, 1991). Also, a laissez-faire approach is not able to resolve fundamental conflicts of interest and can instead reinforce internal politics (Vaara, 2003).

This study also analyzed the relationship between national and organizational cultural differences and operational integration. Our data provides clear support for the view that organizational cultural differences have a strong impact on operational integration. This is probably an effect of the need to invest more in integration in situations where there are clear differences in organizational beliefs, values, or practices. When interpreting these findings, one should bear in mind that our sample consists of related acquisitions. Many such acquisitions are motivated by potential synergy gains the realization of which does require integration efforts. Furthermore, the relationship between organizational cultural differences and operational integration should be interpreted with caution. It is possible that

identification, the error coefficients were fixed to unity. Parameters are standardized maximum likelihood parameter estimates. Ovals illustrate latent variables.
there is a socially constructed reverse causation: the socially constructed perception of organizational cultural differences may emerge only after one engages in close co-operation with the acquisition partner as a result of operational integration efforts.

The fact that we only received marginal support for the impact of national cultural differences on integration is actually not surprising. This is because – once again – concrete organizational cultural differences may be the most obvious causes for integration efforts, while the impact of national cultural differences may be more ambiguous. Further, the greater geographical distance that is often associated with large national cultural differences may make integration efforts difficult.

Finally, we hypothesized that social conflict would have an adverse effect on knowledge transfer. This was clearly supported by our data, implying that a positive atmosphere is beneficial and often even necessary for effective transfer of knowledge. When we consider this finding in the context of the dual effects of operational integration discussed above, we indeed have a clear illustration of the complexities related to knowledge transfer during post-acquisition integration.

CONCLUSION

In our view, this analysis makes four contributions to the literature on cultural differences in mergers and acquisitions. First, the primary contribution of this analysis is that it singles out specific mechanisms through which cultural differences impact post-acquisition integration outcomes. To our knowledge, this is the first empirically grounded model that disentangles and clarifies the way in which national and organizational cultural differences affect social conflict and knowledge transfer. By so doing, this analysis helps to explain some of the contradictory findings in previous research (Chatterjee et al., 1992; Datta, 1991; Lubatkin et al., 1999; Krishnan et al., 1997; Morosini et al., 1998; Shimizu et al., 2004; Veiga et al., 2000; Weber, 1996; Weber et al., 1996).

Second, consistent with our configurational perspective on cultural differences, we have examined the interplay between national and organizational differences. While there are undoubtedly other important cultural facets, our analysis is still one of a very few that distinguish between these two factors and their inter-linked effects (see also Weber et al., 1996). Most interestingly, the effects of national and organizational cultural differences seem to be different, at least in the case of their impact on social conflict. Our interpretation is that specific organizational cultural differences are often the root causes of conflict, while national cultural differences may actually help in conflict situations. Although these results might be related to the specific data that we have according to which the foreign acquisitions of Finnish corporations are driven by knowledge transfer and other kinds of synergy, we nevertheless believe that one would also find similar patterns in other contexts. Regardless of the specific findings, pointing to the different effects of national and organizational cultural differences is also important *per se*, as it shows that national and organizational factors should not simply be lumped together, as is often done in research
and in practice. We hope that our analysis will provide impetus for future studies on more fine-grained distinctions such as industrial and professional cultural differences.

Third, to our knowledge, this is the first post-acquisition integration study that builds on the GLOBE project data (House et al., 2004). Our analysis shows that the GLOBE measures can help to explain phenomena such as social conflict and knowledge transfer. This is important in terms of the applicability of the GLOBE project data, but it is especially significant given the wide criticism that use of Hofstede’s or Trompenaars’ measures has received in international business literature (Kirkman et al., 2006). Obviously, the GLOBE national level data can at best only provide partial and proximal explanations, but they do seem to provide one fruitful way to move forward in analyses of cultural differences in the M&A context.

Fourth, by indicating that social conflict has an adverse effect on knowledge transfer, this study helps us understand the inherent complexities related to knowledge transfer during post-acquisition integration. In this sense, our analysis complements the previous analyses on post-acquisition knowledge transfer (Bresman et al., 1999, Haspeslagh and Jemison 1991). Moreover, by highlighting the adverse effects of social conflict, it also adds to the more general discussions around knowledge and capability transfer (Kostova, 1999; Ranft and Lord, 2002; Szulanski, 1996, 2000).

While our study advances our knowledge of the role of cultural differences in post-acquisition integration, some limitations of this research need to be noted. First, like any structural equation model, ours encompasses only a limited number of causal mechanisms. Second, our data set consists of Finnish corporate acquisitions and is thereby related to the specific characteristics of this setting. While these results are likely to make sense in other contexts as well, it would be interesting to compare the findings with samples from other countries. Third, the data are partly based on the perceptions of the key decision-makers. While this is a common and widely accepted approach, it also inevitably involves some methodological concerns. Most importantly, the relationships between the variables that come from the survey may be affected by retrospective recall or post-hoc constructions (Golden, 1992; Miller, Cardinal and Glick, 1997; Shadish, Cook and Campbell, 2002). However, it should be noted that this concern is not related to national cultural differences and that in the case of organizational cultural differences the singling out of specific mechanisms should alleviate some of the problems. Based on previous studies, one could assume that people would be likely to associate organizational cultural differences with problems such as social conflict, but not with knowledge transfer or other forms of synergy (e.g., Vaara 2002). Yet, our findings indicate strong relationships in both cases. It should also be emphasized that our statistical tests showed no signs of common method bias problems. Fourth, this study has measured key decision-makers’ views. They are arguably the people who should have the best overall picture of the integration processes. However, this focus on the top levels of hierarchy also means that their perspectives are likely to differ, for example, from those of the operating staff.
Our study clarifies some of the essential mechanisms linking cultural differences with overall post-acquisition success. Nonetheless, a variety of issues need closer scrutiny in future studies. As discussed above, there is an apparent need for further analyses disentangling and clarifying the role and relationships of the various factors that are often considered under the broad umbrella of ‘cultural differences.’ This should include an analysis of curvilinear effects. For example, the effects on social conflict can be much more complex than our model of linear causality assumes. There is also a need to better understand how factors other than operational integration mediate the impact of cultural variables on either social conflict or knowledge transfer, and there may be other processes and mechanisms than social conflict and knowledge transfer through which cultural difference impact the ultimate performance of the combined units. There are also likely to be various socio-psychological tendencies related to cultural differences, social conflict, and perceived success that should be given attention in future studies. For example, performance might be cognitively associated with cultural differences as experiences of success may reduce the importance of cultural differences while failures could make the people involved over-emphasize them.

In conclusion, in this paper we have taken a critical view on simplistic analyses of cultural differences in post-acquisition integration. However, unlike some others, we do not believe that we have come to a dead end with this stream of research. Rather, we believe that there is a need to go further by singling out specific processes and mechanisms and to be prepared for surprising and contradictory findings stemming from particular contexts. We are dealing with a complex phenomenon that is likely to keep scholars occupied for many years to come.
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Essay 5: On the Impact of National Cultural Differences on Post-Acquisition Performance

Although interest in cultural issues has increased in recent years, previous studies have presented mixed results concerning the impact of national cultural differences on the outcome of international acquisitions. Drawing on the argument that national cultural differences cause specific integration problems in terms of incompatible beliefs, values and practices, several studies have suggested that national cultural differences tend to have a negative impact on post-acquisition performance (Datta & Puia, 1995; Fatemi & Furtado, 1988; Krug & Hegarty, 1997; Krug & Nigh, 1998; Olie, 1994; Schoenberg, 1996; Schoenberg, 2004; Vaara, 2003; Weber, Shenkar, & Raveh, 1996). In contrast, other studies have argued that culturally distant acquisitions can provide access to specific resources and create opportunities for knowledge transfer and have reported supporting empirical findings (Doukas & Travlos, 1988; Harris & Ravenscraft, 1991; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Markides, Oyon, & Ittner, 1990; Morosini, Shane, & Singh, 1998; Swenson, 1993).

These mixed results can be interpreted in different ways. One is to argue that there may not exist any clear-cut causal relationships between national cultural differences and post-acquisition performance. According to this view, we should abandon the national cultural distance concept altogether and move towards new issues and attempt to uncover other processes and mechanisms in the mergers and acquisitions (M&A) context. Another interpretation is that the causal relationships are real, but that they are not as straightforward as suggested in previous research. Causal relationships may be non-linear or affected by a variety of other factors and disguised by other causal mechanisms. According to this perspective, there is a need for a closer look at the causal relationships. This is the view that we have adopted in this study. In this paper, we argue that the contradictory arguments and the mixed results of prior research indicate that the relationship is more complicated than previously assumed. In view of the mixed research findings and the multiple causal mechanisms at play, we expect to see non-linear effects when moving from domestic to culturally distant international acquisitions. We concentrate on two performance aspects that have been considered important in previous acquisition literature: synergy realization and knowledge transfer.

We examine our hypotheses with extensive data gathered on the domestic and foreign acquisitions of Finnish companies. This is a setting that allows us to compare the results of previous studies conducted in specific contexts with the findings coming out of this socio-cultural setting and thus provides an opportunity to critically evaluate the generalizability of the prevailing theories. To avoid the limitations linked with Hofstede’s (1980) widely used measures of national cultural distance, we apply the GLOBE project scores (House, Hanges, Javidan, Dorman, & Gupta, 2004) in our measurement of national cultural differences.

99 This essay is based on the article “On the Impact of National Cultural Differences on Post-Acquisition Performance” co-authored by Eero Vaara.
difference. To our knowledge, this study is amongst the first analyses that make use of these newly developed national cultural measures in the M&A context.

Our regression analyses provide evidence that the relationship between national cultural distance and performance is better represented with a curvilinear (U-curve) relationship than with a linear one when performance is measured as synergy realization or knowledge transfer. To our knowledge, this is the first study that reports such a curvilinear relationship. In this sense, our study extends the theoretical knowledge in this field. Furthermore, these findings have important practical implications. On the one hand, managers involved in international acquisitions should beware of “cultural myopia”, that is the risks related to culturally close acquisitions. On the other, there is special value to be created in culturally distant cases.

This paper is structured as follows. After a brief overview of previous research, we outline hypotheses concerning the impact of national cultural differences on synergy realization and knowledge transfer. The next section describes the research methodology and the measurement of the theoretical constructs. This is followed by a discussion of the results of our regression analyses. In the final section, we discuss the implications of our results and offer suggestions for future research and managerial practice.

An overview of prior research

As a part of general enthusiasm around cultural perspectives, researchers started to analyze mergers and acquisitions from a cultural perspective in the mid-1980s (Buono, Bowditch, & Lewis, 1985; Sales & Mirvis, 1984; Walter, 1985). This meant an infiltration of cultural discourse into the strategic- or human-resource-oriented studies on mergers and acquisitions, but also the emergence of a new stream of research. Since then, we have seen a proliferation of studies focusing on the organizational cultural differences and their impact on post-merger or post-acquisition integration processes. Some of these studies have been rich analyses of specific cases (Buono et al., 1985; Gertsen, Soderberg & Torp, 1998; Olie, 1994; Stahl & Mendenhall, 2005; Soderberg & Vaara, 2003; Vaara, 2003; Walter, 1985) and others more rigorous quantitative studies of the impact on cultural differences on post-merger or post-acquisitions performance (Chatterjee, Lubatkin, Schweiger, & Weber, 1992; Datta, 1991; Krishnan, Miller, & Judge, 1997; Lubatkin, Schweiger, & Weber, 1999; Weber, 1996; Weber & Pliskin, 1996). A central part of this research stream has focused on the argument that cultural differences – differences in organizational beliefs and values – are major causes of organizational problems (Buono et al., 1985; Cartwright & Cooper, 1996; Elsass & Veiga, 1994; Sales & Mirvis, 1984; Weber, 1996; Weber et al., 1996) and have a negative effect on performance (Chatterjee et al., 1992; Datta, 1991; Lubatkin et al., 1999).

In international settings, drawing on literature concerning different national cultural features (Hofstede, 1980, 1991; Trompenaars, 1993), researchers have concentrated on national cultural differences. These studies have included longitudinal case analyses
(Birkinshaw, Bresman, & Håkanson, 2000; Napier, Schweiger, Kosglow, 1993; Olie, 1994), statistical analyses of various kinds (e.g. Calori, Lubatkin, & Very, 1994; Datta & Puia, 1995; Lubatkin, Calori, Very, & Veiga, 1998; Morosini, Shane, & Singh, 1994; Morosini et al., 1998; Very, Lubatkin, Calori, 1996; Very, Lubatkin, Calori, & Veiga, 1997), as well as more critical analyses examining constructions of cultural conceptions and their implications (Vaara, 2000; Vaara, Tienari, & Säntti, 2003).

Most of the scholars have argued that international mergers and acquisitions bring with them specific problems and challenges when it comes to organizational integration. Studies have found clear empirical support for the negative effect of national cultural difference on post-acquisition performance (Datta & Puia, 1995; Fatemi & Furtado, 1988; Krug & Hegarty, 1997; Krug & Nigh 1998, Olie, 1994; Schoenberg, 1996; Schoenberg, 2004; Weber et al., 1996). While most of the studies have associated national cultural differences with negative effects, others have argued that cultural differences can be sources of value and learning. There are also analyses reporting a positive relationship between national cultural differences and post-acquisition performance (Doukas & Travlos, 1988; Harris & Ravenscraft, 1991; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Markides et al., 1990; Morosini et al., 1998; Swenson, 1993; Olie & Verwaal, 2004).

To a significant extent, these mixed findings have remained unexplained (Stahl & Voigt, 2005). There are, however, several potential explanations for the contradictions and ambiguities. First, one obvious reason is the use of different measures of national cultural differences. To measure national cultural differences, many acquisition studies have chosen to compare domestic and international acquisitions by forming a dummy variable (Capron, Mitchell, & Swaminathan, 2001; Larsson, 1993; Larsson & Finkelstein, 1999; Larsson & Lubatkin, 2001; Lubatkin et al., 1998). Other studies aiming at a more fine-grained analysis on national cultural differences have used Hofstede’s (1980) scores of national cultural differences either by using these dimensions separately (Markides & Ittner, 1994; Morosini et al., 1994, Weber et al., 1996) or by constructing an aggregate index similar to Kogut and Singh (1988) (Datta & Puia, 1995; Krug & Nigh, 1998; Morosini et al., 1998).

Second, the mixed findings also relate to the performance measures used. These have varied from accounting-based measures to stock-market reactions and socio-cultural integration outcomes (Stahl & Voigt, 2005). All measures obviously have strengths and weaknesses. In a sense, the stock-market or accounting-based measures provide the most “objective” measures of success. However, at the same time, these measures are not necessarily able to capture the overall success of the post-acquisition integration process compared with the specific expectations and goals set by the key decision-makers (Stahl & Voigt, 2005). When it comes to self-reported measures, it makes a great difference whether we are looking at the overall evaluations of success or failure, or specifically focus on synergy effects or knowledge transfer.

Third, and most importantly, the mixed results may also be due to the multiple causal mechanisms at play. The generative mechanism may be counteracted by opposing mechanisms, thus canceling each other out. Here, we must first distinguish the mechanisms
related to concrete cultural elements such as beliefs, values and practices embedded in specific settings and their effects on post-acquisition integration. As indicated above, it is evident that international mergers and acquisitions bring with them additional problems and challenges when it comes to organizational integration. These relate to different institutional systems, administrative practices, and organizational traditions (Calori, Lubatkin, Very, & Veiga, 1997; Lubatkin et al., 1998). There are also particular problems caused by different behavioral patterns, communication practices as well as language differences (Madura, Vasconcellos, & Kish, 1991; Vaara, 2003). At the same time, specific differences may also be seen as resources that can be used in a variety of ways. In particular, the differences in the form of complementary resources may be sources of knowledge and capability transfer (Harrison, Hitt, Hoskisson, & Ireland, 1991) and otherwise contribute to organizational learning across cultural barriers (Barkema, Bell, & Pennings, 1996). They can thus be potential sources of synergy (Larsson & Finkelstein, 1999; Larsson & Risberg, 1998). What complicates the picture is that it is not only the differences per se that have an effect on the post-acquisition dynamics, but also the awareness of these differences (Harzing, 2004; Shenkar, 2001; Vaara, 2000). Importantly, it is often the undetected cultural differences that cause the gravest problems. This can be seen as the “paradox of cultural proximity” (Vaara, 2000) or “cultural myopia” (Harzing, 2004).

The curvilinear impact of national cultural differences

Part 1: A decreasing curve as firms move from domestic to international acquisitions

At the core of the literature on international acquisitions is the question of whether domestic or foreign acquisitions lead to better outcomes. The classical argument in international human resource management is that international cases tend to be more complex than domestic ones due to problems created by geographic dispersion, differing local rules and regulations, uncertainty and information asymmetry, as well as incompatible beliefs, norms and practices (Olie, 1994; Schraeder & Self, 2003; Zaheer, 1995). International cases also deal with national identity and may more easily lead to the politicization of specific issues (Vaara, 2003). Due to the problems related to international acquisitions, synergy realization and knowledge transfer is likely to be easier in domestic acquisitions than in international ones. This would suggest a decreasing curve in synergy realization and knowledge transfer when one moves from domestic to international acquisitions.

Part 2: An increasing curve as firms move from national culturally close to national culturally distant acquisitions

In case of international acquisitions, drawing from resource and knowledge-based views, researchers have argued that culturally distant international acquisitions provide advantages compared to culturally close international acquisitions. Larsson and Finkelstein (1999) argued that culturally distant acquisitions offer more potential for synergy because overlaps
are less likely to exist and thus combination potential may be more complementary, and hence less threatening. Also, Morosini et al. (1998) argued that acquisitions in culturally more distant countries can provide access to diverse routines and repertoires that have the potential to enhance the combined firm’s performance over time by contributing to its competitive advantage through knowledge transfer. This would imply that, although synergy realization and knowledge transfer decrease as one moves from domestic to international acquisitions, both synergy realization and knowledge transfer begin to re-increase as national cultural differences become larger.

Furthermore, studies examining cultural awareness suggest that the awareness of the cultural differences grows when the national cultural distance increases. In particular, the “cultural proximity paradox” (Vaara, 2000) or “myopia” (Harzing, 2004) effect seems to predict specific problems for culturally closer cross-border acquisition cases. This is because people are not always aware of subtle but important cultural differences in settings of apparent cultural proximity. This is problematic because it is precisely the unanticipated cultural differences that often cause the greatest disappointments vis-à-vis initial plans. Moreover, it is the undetected cultural differences that create particularly cumbersome problems in social interaction, for example, in terms of misunderstandings and mistrust. These problems complicate synergy realization and knowledge transfer in culturally close international acquisitions. Therefore, synergy realization and knowledge is likely to be lower in culturally close international acquisitions than in culturally distant international acquisitions.

An additional explanation is related to the strategic logic of acquisitions. Firms have a tendency to do the most distant acquisitions in the most related core business areas (Laamanen, 1997). When the firms go to the other side of the world to perform an acquisition, the managers really need to have a good strategic logic for doing so (Laamanen, 1997). Therefore, the most distant firms are likely to be closer to the core businesses of the acquiring firms (Laamanen, 1997) and, consequently, more likely to contribute to higher degrees of synergy realization and knowledge transfer.

**Combining Part 1 and Part 2**

In conclusion, according to this logic, if domestic acquisitions generally have a higher level of synergy realization and knowledge transfer than international acquisitions, but both synergy realization and knowledge transfer increase as one moves to culturally more distant international acquisitions, one would expect a U-shaped curvilinear relationship to emerge when we move from domestic to culturally more distant international acquisitions. A 1x1 matrix of justification is presented in Figure 1.

---

100 It should be noted that, although cultural awareness grows as national cultural differences increase, this does not imply that international acquisitions with low national cultural differences are neutral or non-problematic. On the contrary, cultural proximity paradox suggests that it is the foreign cases with relatively small national cultural differences that are likely to cause unanticipated problems because apparently small but crucial cultural differences.
Therefore, we present the following hypotheses:\(^\text{101}\):

Hypothesis 1: The relationship between national cultural distance and synergy realization is curvilinear (U-curve).

Hypothesis 2: The relationship between national cultural distance and knowledge transfer is curvilinear (U-curve).

<table>
<thead>
<tr>
<th>Domestic acquisitions</th>
<th>Culturally close international acquisitions</th>
<th>Culturally distant international acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synergy realization and knowledge transfer <strong>decrease</strong> as firms move from domestic acquisitions to culturally close international acquisitions:</td>
<td>Synergy realization and knowledge transfer <strong>increase</strong> as firms move from culturally close international acquisitions to culturally distant international acquisitions:</td>
<td></td>
</tr>
<tr>
<td>-International deals are more complex than domestic deals (<em>international business theory</em>)</td>
<td>-Culturally distant international acquisitions are more likely to provide more complementary and diverse resources than culturally close domestic acquisitions (<em>resource based view</em>)</td>
<td></td>
</tr>
<tr>
<td>-Culturally close international acquisitions are likely to suffer from cultural proximity paradox (<em>cultural distance paradox</em>), which results in integration problems</td>
<td>-Culturally distant international acquisitions are more likely to be done in the core business areas (<em>strategic logic/configurational approach</em>)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Culturally close international acquisitions are more likely to suffer from cultural proximity paradox than culturally distant international acquisitions (<em>cultural distance paradox</em>).</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1: 1x1 matrix of justification for the hypotheses.**

\(^\text{101}\) We do not provide separate hypothesis justifications for synergy realization and knowledge transfer because both are likely to be driven by similar mechanisms that affect acquisition value creation suggested by the international business theory, knowledge based view, cultural distance paradox, and strategic logic/configurational approach.
Research methodology and measures

The research setting

In this paper, we analyze domestic and foreign acquisitions carried out by Finnish corporations. We collected our data through three mail surveys, the first covering the period of 1993-1996, the second survey the period of 1997-2000, and the third survey the period of 2001-2004. For a detailed discussion on these data collection rounds, sampling criteria, questionnaire design, and resulting samples, please see earlier sections 4.1.1-4.1.5.

The three surveys resulted in a total number of 297 acquisitions, out of which 164 were domestic and 133 were foreign. Out of the foreign acquisitions, 24 acquisitions were in Sweden, 21 in Germany, 13 in Estonia, 9 in Switzerland, 8 in Russia, 7 in Poland, 4 in Norway, 4 in Canada, 4 in France, 3 in Denmark, 3 in Lithuania, 3 in the Netherlands, 3 in China, 2 in South Africa, 2 in Belgium, 2 in Russia, 2 in Italy, 2 in Austria, and 1 acquisition each in Australia, Brasilia, Columbia, Hungary, Latvia, Korea, and Romania.

Dependent variables

Synergy realization

Contemporary mergers and acquisitions are primarily horizontal and often aim at synergy (Larsson, 1993) or value creation (Hampel & Jemison, 1991). Larsson and Finkelstein (1999) argue that the success of a merger or acquisition is caused by the degree of synergy realization rather than more removed and potentially ambiguous criteria such as accounting or market returns. This is also our perspective in this paper.

Synergies can be realized across different organizational functions. For instance, in production, economies of scale and increased purchasing power can provide synergies (Kitting, 1967). In similar vein, marketing synergies can be realized by combining sales forces and distribution channels for the sale of complementary product lines. In finance, synergies can stem from reducing overhead costs and achieving tax benefits (Mirvis & Marks, 1992). Managerial synergies, in turn, include improved managerial processes such as improved personnel administration (Kitting, 1967). Marks and Mirvis (2001) note that in many cases, financial fit receives a disproportionate amount of attention and priority in

102 Out of the foreign acquisitions, 24 acquisitions were in Sweden, 21 in Germany, 13 in Estonia, 9 in Switzerland, 8 in Russia, 7 in Poland, 4 in Norway, 4 in Canada, 4 in France, 3 in Denmark, 3 in Lithuania, 3 in the Netherlands, 3 in China, 2 in South Africa, 2 in Belgium, 2 in Russia, 2 in Italy, 2 in Austria, and 1 acquisition each in Australia, Brasilia, Columbia, Hungary, Latvia, Korea, and Romania.
pre-acquisition process whereas in successful cases, financial criteria are respected and adhered to, but are balanced by careful consideration of each of the synergies sought in a combination and what it will take to realize them.

In previous research, synergy realized has been measured using taxonomy of managerial goals in mergers and acquisitions as the level of achievement of the acquirer’s goals (Brock, 2005; Walter & Barney, 1990). Although closely related, in our opinion, goal achievement better reflects the overall success of the acquisition from the acquiring company viewpoint than the extent to which synergies were realized. Also, the unidimensionality of the scale poses a validity problem. Therefore, we opted for a creation of a multidimensional measure for synergy. We asked the respondents the following question: “When evaluating the current situation, have synergistic benefits (e.g. cost savings or efficiency improvements) been achieved by the integration of different operations? The respondents were asked to answer the question separately concerning the following five functions: management & control, sales & marketing, production, research & development, finance. A seven-point Osgood scale (1 = not at all, 7 = very much) was used. For the analysis, we built a sum of these questions to represent the total amount of synergies realized. The five questions had a Cronbach’s alpha value of 0.86.

Knowledge transfer

Building on resource-based and knowledge-based views as well as dynamic capabilities approach, researchers have suggested that knowledge transfer plays a key role in acquisition value creation (Ahuja & Katila 2001, Finkelstein & Halebian 2002, Gammelgaard 2004, Karim & Mitchell 2000). Through knowledge transfer, the acquiring firm can obtain a unique knowledge stock of proven value that is difficult or time-consuming to imitate (Belberdos, 2003; Empson, 2001) and, consequently, can expand its product lines without the risk involved in internal innovation (Hitt, Hoskisson, & Ireland, 1990). In addition, the acquiring firm can decrease transaction costs related to protecting knowledge compared to market transactions or licensing agreements (Teece, Pisano, & Shuen, 1997). Also, tacit knowledge can be more easily obtained through acquisitions than through contractual arrangements (Karim & Mitchell, 2000). Due to these and other benefits, knowledge transfer has been linked to a better post-acquisition performance in previous acquisition studies (Bresman et al., 1999; Haspeslagh & Jemison, 1991; Hébert et al., 2005).

While measuring knowledge transfer, we followed the example of previous studies on organizational knowledge transfer in multinational companies (Zander, 1991) and in acquisitions (Bresman, Birkinshaw, & Nobel, 1999; Capron & Mitchell, 1998). We measured knowledge transfer as the mean of five questions concerning the extent to which knowledge transfer had resulted in benefits across the following organizational functions: management and control, sales and marketing, production, research and development, and finance. The Cronbach’s alpha for our knowledge transfer construct was 0.80.
Independent variables

National cultural distance

We measured national cultural distance by using the GLOBE practices scores (House et al., 2004). National cultural distance measures utilizing Hofstede’s (1980) scores, although widely used (see recent reviews by Harzing, 2004, and Kirkman, Lowe, & Gibson, 2006), the scores and their use in research studies has also been widely criticized (Harzing, 2004; Shenkar, 2001; Tayeb, 1994). The GLOBE-project attempted to create more accurate national cultural differences scores. As opposed to Hofstede’s four dimensions (uncertainty avoidance, power distance, individualism) and a later fifth dimension (long-term orientation), GLOBE-scores have nine cultural dimensions: assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, power distance, and uncertainty avoidance. GLOBE-scores have been developed for both practices and values. We used the practices scores because they measure actual rather than ideal differences.\(^{103}\)

Based on nine dimensions of GLOBE-practice scores, we built an index of national cultural differences following the formula of Morosini et al. (1998).\(^{104}\) Our index of national cultural differences represented the aggregate national cultural distance of the two acquisition parties: 

\[
CD_j = \sqrt{\sum_{i=1}^{9} (I_{ij} - I_{jF})^2}
\]

where:

- \(CD_j\): the cultural difference for the jth country
- \(I_{ij}\): Globe score for i:th cultural dimension and j:th country
- \(F\): indicates Finland

Since our sample included a large number of domestic acquisitions with a national cultural distance of 0, the variable was positively skewed. We conducted a logarithmic

\(^{103}\) The statistical tests further supported this choice by showing that practices scores measuring actual differences correlated more strongly with post-acquisition performance than value scores measuring ideal differences.

\(^{104}\) Morosini et al. (1998) used Hofstede’s (1980) scores for four national cultural dimensions in calculating the index. We chose to use the more recent GLOBE-scores.

\(^{105}\) The formula of Morosini et al. (1998) differs from the original index of Kogut and Singh (1988) in the sense that it is not variance adjusted. We also tested our models with the original index of Kogut and Singh (1988). The same variables were significant in both models. In addition, we tested our models with the index of Euclidean distance (Barkema & Vermeulen, 1997), which produced less significant results. We chose to follow the formula of Morosini et al., (1998) because this has been widely used in this context.
transformation, which is recommended for positively skewed variables in order to obtain a more normal distribution (Tabachnick & Fidell, 1996).  

By using GLOBE scores from a source external to the sample we avoided the problem of common method variance caused by the same individuals answering questions about national culture in the same way as they answer questions about synergy realization and knowledge transfer. In addition, we could thus deal with retrospective rationalizing concerning national cultural differences that could be problematic if we had utilized more subjective measures of national cultural differences as perceived by the managers involved in acquisitions (Morosini et al., 1998).

Related to recent discussion on the similarities vs. differences between the Hofstede’s and GLOBE-measures (see Hofstede, 2006; Javidan, House, Dorman, Hanges, & Sully de Luque, 2006), it should be noted that our results were essentially similar regardless of whether Hofstede’s four main dimensions or GLOBE-practices scores were utilized. This convergence supports the general validity of our results. It is also consistent with the view that despite methodological differences, Hofstede’s and GLOBE-measures are only variations of the same form of cultural research that utilizes large-scale multi-country surveys (Early, 2006), and should consequently produce similar types of results.

**Control variables**

**Time elapsed**

Time elapsed since acquisition could impact the outcome of acquisitions (Greenwood, Hinings, & Brown, 1994). Thus, we controlled for the time that had elapsed since the acquisition took place. We used the data provided by the Talouselämä-magazine database.

**Size**

Following previous studies (Haleblian & Finkelstein, 1999; Kusewitt, 1985; Larsson & Finkelstein, 1999; Morosini et al., 1998), we controlled for the size of the acquisition. We measured this as the turnover by the acquired company at the time of acquisition. Since the variable was positively skewed, we did a logarithmic transformation for the variable to achieve normal distribution. These data were derived from a database on acquisitions maintained by the magazine Talouselämä.

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106 This was done by first adding a constant to all the values of the national cultural distance variable to obtain positive values required for the logarithmic transformation. Then, we took a logarithm of this variable. To test whether the logarithmic transformation impacted our results, we tested our model both with the logarithmic variable and with an untransformed variable. The results were essentially the same. In this paper, we report the results using the logarithmic variable.
Industry

Morosini et al. (1998) suggest that service industry might impact post-acquisition integration due to industry differences reported in the preference of acquisitions as an entry mode (Kogut & Singh, 1998). We controlled for sectoral effects by using a dummy variable to indicate whether the acquisition was in service industry (1= service industry, 0=others) using data from Talouselämä-magazine database.

Organizational cultural differences

Following the example of previous studies (Chatterjee et al., 1992; Lubatkin et al., 1999; Weber 1996, Weber et al., 1996) we used direct questions concerning the perceived organizational cultural differences that existed before the acquisition as reported by top managers. Our organizational cultural differences construct was a mean variable based on the responses provided on pre-acquisition differences across different organizational functions (management and control, sales and marketing, production, R&D, finance), pre-acquisition differences in company values in general, as well as pre-acquisition differences in the values of decision-makers. The respondents answered each question on an Osgood scale from 1 to 7 where 1 corresponded to “no differences” and 7 to “significant differences”. This construct had a Cronbach’s alpha of 0.81.

Operational integration

Building on, but adapting the questions used in previous studies (Birkinshaw et al., 2000; Krishnan & Park, 2003; Larsson & Lubatkin, 2001; Lubatkin et al., 1998; Morosini et al., 1994; Weber et al., 1996), we controlled for the level of operational integration as it might drive the level of synergy realization and knowledge transfer in acquisitions. This variable was based on the sum of four questions measuring the number of changes made in the acquired company, the tendency towards standardization of practices, the extent to which the decisions had been based on maximization of synergistic benefits, and the extent to which overlaps had been eliminated. The respondents replied to each question on an Osgood scale from 1 = “not at all” to 7 = “a great deal.” The construct had a Cronbach’s alpha of 0.70.

Results

The descriptive statistics and correlation matrix are reported in table 1. To test our hypothesis, we ran four multiple regression models with SPSS 13.0 software. The assumed relationship in multiple regression analysis is a linear association based on the correlations among the independent variables and the dependent measure. However, transformations or additional variables are also available to assess whether other types of relationships exist, particularly curvilinear relationships (Tabachnick & Fidell, 1996). Thus, regression analysis enabled us to test hypotheses concerning curvilinear relationships. We standardized all
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Synergy realization</strong></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2 Knowledge transfer</strong></td>
<td>0.612***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3 Time elapsed</strong></td>
<td>0.071</td>
<td>0.016</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4 Size</strong></td>
<td>-0.113+</td>
<td>-0.096</td>
<td>-0.012</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5 Industry</strong></td>
<td>0.118+</td>
<td>0.054</td>
<td>0.098</td>
<td>-0.060</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6 Organizational cultural differences</strong></td>
<td>0.098+</td>
<td>0.148*</td>
<td>-0.062</td>
<td>-0.046</td>
<td>0.205***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7 Operational integration</strong></td>
<td>0.572***</td>
<td>0.352***</td>
<td>0.077</td>
<td>-0.011</td>
<td>0.046</td>
<td>0.120*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8 National cultural distance</strong></td>
<td>-0.198**</td>
<td>-0.035</td>
<td>-0.018</td>
<td>0.083</td>
<td>-0.155*</td>
<td>0.089</td>
<td>-0.127*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td><strong>9 Squared national cultural distance</strong></td>
<td>-0.154*</td>
<td>0.018</td>
<td>-0.020</td>
<td>0.048</td>
<td>-0.152*</td>
<td>0.098</td>
<td>-0.122*</td>
<td>0.955***</td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>4.663</td>
<td>4.561</td>
<td>2.753</td>
<td>62.1993</td>
<td>0.210</td>
<td>4.843</td>
<td>4.701</td>
<td>0.069</td>
<td>0.013</td>
</tr>
<tr>
<td><strong>S.D.</strong></td>
<td>1.270</td>
<td>1.121</td>
<td>1.205</td>
<td>224.364</td>
<td>0.408</td>
<td>0.922</td>
<td>1.168</td>
<td>0.089</td>
<td>0.019</td>
</tr>
</tbody>
</table>

+ $p < 0.10$  * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All two-tailed tests.

*Table 1. Means, standard deviations, and correlations for the variables in the models.*
variables before entering them into the regression analyses. Collinearity statistics based on
the VIF value indicated no multicollinearity. Furthermore, a visual examination of a
histogram of residuals showed that the residuals were normally distributed, which indicated
no major heteroskedasticity problems.

Table 2 and 3 present the results of our two hierarchical second order regression analyses.
We tested whether we could find evidence for a curvilinear relationship suggested in
hypotheses 1 and 2. To test curvilinear relationships, the common practice is to start with
the linear component \( x^1 \) and then sequentially add the higher-order polynomial \( x^2 \),
which represents the quadratic component) (Hair, Anderson, Tatham, & Black, 1998;
Tabachnick & Fidell, 1996). A U-shaped curve is indicated by a positive quadratic term.
Since some amount of multicollinearity is introduced by the additional quadratic term,
statistical significance testing of the polynomial terms may become inappropriate. One
should, instead, compare the values of \( R^2 \) in linear and quadratic models by testing whether
the incremental \( R^2 \) is statistically significant (Hair et al., 1998), which is the approach that
we use in this paper.

Thus, to test our Hypothesis 1, we added a second-degree term of national cultural distance
and then compared whether it resulted in any improvement in the model fit compared to a
linear model. A statistically significant incremental \( R^2 \) (incremental \( R^2 \) of 0.018, significant at the \( p < 0.01 \) level) suggested that the quadratic term was significantly
associated with synergy realization. A positive sign of the quadratic term (standardized \( \beta = 0.464 \), significant at the \( p < 0.01 \) level) suggested a U-shaped curve. Thus, we found strong
support for Hypothesis 1 that suggested a positive curvilinear relationship between national
cultural distance and synergy realization.

To test our Hypothesis 2, we repeated the procedure while using knowledge transfer as our
dependent variable. We added a second-order term of national cultural distance and
examined whether the resulting improvement in the model fit compared to a linear model
was statistically significant. The second order term was positive and significant
(standardized \( \beta = 0.699 \), significant at the \( p < 0.001 \) level). Similarly, the incremental \( R^2 \)
was significant (incremental \( R^2 \) of 0.040, significant at the \( p < 0.001 \) level).
Thus, Hypothesis 2 suggesting a positive curvilinear relationship between national cultural
distance and knowledge transfer was supported.
Table 2. Results of the regression analyses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control variables</th>
<th>Linear model</th>
<th>Curvilinear model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Time elapsed</td>
<td>-0.108*</td>
<td>-2.109</td>
<td>0.036</td>
</tr>
<tr>
<td>Size</td>
<td>-0.109*</td>
<td>-2.139</td>
<td>0.033</td>
</tr>
<tr>
<td>Industry</td>
<td>0.063</td>
<td>1.223</td>
<td>0.222</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>0.007</td>
<td>0.136</td>
<td>0.892</td>
</tr>
<tr>
<td>Operational integration</td>
<td>0.582***</td>
<td>11.287</td>
<td>0.000</td>
</tr>
<tr>
<td>National cultural distance</td>
<td>-0.091</td>
<td>-1.731</td>
<td>0.085</td>
</tr>
<tr>
<td>Squared national cultural distance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>28.352***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td>0.367</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.355</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental R square</td>
<td>0.008+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Synergy realization

+ p < 0.10 * p < 0.05, ** p < 0.01, *** p < 0.001

All two-tailed tests.
Table 3. Results of the regression analyses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control variables</th>
<th>Linear model</th>
<th>Curvilinear model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>$t$</td>
<td>Sig.</td>
</tr>
<tr>
<td>Time elapsed</td>
<td>-0.103+</td>
<td>-1.806</td>
<td>0.072</td>
</tr>
<tr>
<td>Size</td>
<td>-0.082</td>
<td>-1.444</td>
<td>0.150</td>
</tr>
<tr>
<td>Industry</td>
<td>0.096+</td>
<td>1.663</td>
<td>0.098</td>
</tr>
<tr>
<td>Organizational cultural differences</td>
<td>0.129*</td>
<td>2.244</td>
<td>0.026</td>
</tr>
<tr>
<td>Operational integration</td>
<td>0.403***</td>
<td>7.038</td>
<td>0.000</td>
</tr>
<tr>
<td>National cultural distance</td>
<td>0.051</td>
<td>0.087</td>
<td>0.387</td>
</tr>
<tr>
<td>Squared national cultural distance</td>
<td>0.699***</td>
<td>3.617</td>
<td>0.000</td>
</tr>
</tbody>
</table>

F 13.936*** 11.727*** 12.422***
R square 0.223 0.225 0.265
Adjusted R square 0.207 0.206 0.244
Incremental R square 0.002 0.040***

Dependent variable: Knowledge transfer
$+p < 0.10 \ast p < 0.05, **p < 0.01, ***p < 0.001$
All two-tailed tests.
Concerning our control variables, organizational cultural differences did not explain synergy realization but they were positively linked to knowledge transfer (standardized $\beta = 0.118$, significant at the $p < 0.05$ level). Operational integration was a strong explanator of both synergy realization (standardized $\beta = 0.569$, significant at the $p < 0.001$ level) and knowledge transfer (standardized $\beta = 0.411$, significant at the $p < 0.001$ level). Time elapsed since acquisition was slightly negatively related to synergy realization (standardized $\beta = -0.091$, significant at the $p < 0.10$ level). In addition, size was slightly negatively related to synergy realization (standardized $\beta = -0.086$, significant at the $p < 0.10$ level) while firms in the service industry tended to result in slightly more knowledge transfer (standardized $\beta = 0.107$, significant at the $p < 0.10$ level).

**Discussion and conclusions**

Previous research has provided mixed results concerning the impact of national cultural differences on post-acquisition integration (Datta & Puia, 1995; Fatemi & Furtado, 1988; Harris & Ravenscraft, 1991; Krug & Hegarty, 1997; Krug & Nigh, 1998; Larsson & Finkelstein, 1999; Larsson & Risberg, 1998; Morosini et al., 1998; Olie & Verwaal, 2004; Schoenberg, 2004; Weber et al., 1996). Hence, in this paper, we examined whether we could reconcile the seemingly contradictory results of previous studies by modeling national cultural distance with a curvilinear relationship.

We found evidence that both the relationship between national cultural distance and synergy realization and the relationship between national cultural distance and knowledge transfer were better represented with a curvilinear (U-curve) relationship than with a linear one. This suggests that when firms move into foreign countries that are relatively close on the national cultural distance scale, the performance of acquisitions, measured by synergy realization and knowledge transfer, decreases. However, when cultural distance became larger in foreign acquisitions, both synergy realization and knowledge transfer started to improve. Such a U-shape relationship thus provides an interesting explanation to the inconsistent results reported in previous research reporting both negative and positive performance effects related to national cultural differences.

We think there are three main reasons for the U-shape. First, international human resource management literature proposes several reasons why international cases tend to be more complex than domestic ones. These include, amongst others, problems created by geographic dispersion, differing local rules and regulations, uncertainty and information asymmetry, as well as incompatible beliefs, norms and practices (Olie, 1994; Schraeder & Self, 2003; Zaheer, 1995). Therefore, it is not surprising that synergy realization and knowledge transfer tends to be easier in domestic acquisitions, which explains the “beginning” of the U-shape curve.

Second, the resource and knowledge-based views support the reasoning that culturally distant foreign acquisitions can offer access to diverse routines and repertoires that contribute to the firm’s competitive advantage and thus positively impact performance (Morosini et al., 1998). In culturally distant acquisitions, the resources are also likely to
be more different with fewer overlaps leading to a more complementary combination potential, which is perceived as less threatening by the employees (Larsson & Finkelstein, 1999). Due to these reasons, there is likely to be more synergy and knowledge transfer potential in culturally distant acquisitions, and less organizational resistance that would impede the realization of this potential, which explains the “end” of the U-shape curve.

Third, the awareness of the cultural differences is likely to grow when the national cultural distance increases leading to the “cultural proximity paradox” (Vaara, 2000) or “myopia” (Harzing, 2004) - disregard of relatively small but important national cultural differences that cause major problems during the integration process. This explains the “middle” section of the U-shape curve.

We believe that this analysis makes a contribution to the existing research in this area by helping to explain why some of the previous research findings appear contradictory. This is done by showing that the relationship between national cultural differences and key post-acquisition outcomes is not negative or positive, but curvilinear. To the best of our knowledge, this is the first study that hypothesizes and reports a curvilinear relationship between national cultural distance and post-acquisition performance. This discovery is important in the sense that it opens up a new way of thinking for researchers and practitioners. While we believe that one would, in most settings, find evidence of such a curvilinear relationship, it is also possible that the form would be more complex or something else in the case of specific international settings. The main point is that we should not fall prey to the simplest kinds of assumptions concerning linear relationships when dealing with multiple and partly contradictory causal mechanisms at play. In addition, our analysis shows that one should pay specific attention to cultural differences in settings of apparent cultural proximity. This is an important finding that has both theoretical and practical implications. While this analysis cannot single out specific causes for this observation, we believe that this is due both the fact that culturally distant acquisitions provide specific opportunities for complementary synergies and knowledge transfer (Larsson & Finkelstein, 1999; Morosini et al., 1998) and to the effects of “cultural myopia” (Harzing, 2004; Vaara, 2000).

Most importantly, our analysis has also clear managerial implications. On the one hand, our analysis suggests that one should pay specific attention to national cultural differences in settings of apparent cultural proximity. This is because such cases can involve a specific risk for cultural myopia, that is, a disregard for subtle but important cultural differences. On the other hand, our study demonstrates that cultural differences do not only imply integration obstacles, but are also valuable sources of learning and value. Contrary to common belief, our analysis actually shows that increasing national cultural distance tends to have a positive impact on performance.

While we have taken some important steps to clarify the nature and direction of national cultural differences in acquisitions, there are many issues that deserve more specific attention in future studies. This study suggests that there is a clear need to go further in specifying what the actual causal mechanisms are through which national cultural differences impact synergy realization and knowledge transfer. These studies could draw on the analysis of Larsson and Finkelstein (1999), which mapped out such
mechanisms in their empirical analysis including both domestic and foreign acquisitions and the insightful ideas of Stahl and Voigt (2005) in their review of the literature on international acquisitions. Future studies should also concentrate on the socio-psychological processes related to cultural myopia (e.g. Harzing, 2004), although this is methodologically challenging. Finally, we concentrated on testing direct effects of national cultural. Previous research, however, has identified specific mediating and moderating variables in cross-border acquisitions (Björkman, Stahl, & Vaara, 2007; Krug & Nigh, 1998; Larsson & Finkelstein, 1999; Morosini et al., 1994; Very et al., 1996). Such variables deserve closer scrutiny in future studies. In the light of our results, a specific challenge for future research is to combine the testing of both non-linear and indirect effects of national cultural differences in order to fully understand the impact mechanisms of national cultural differences in acquisitions.
References


APPENDIX 3 RESEARCH QUESTIONNAIRE

Research on Finnish Corporate Acquisitions

Acquirer:
Acquired:

<table>
<thead>
<tr>
<th>Background of the Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name:</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>2. Position and employer at the time of acquisition?</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>3. Did you participate in the decision making process leading to the acquisition?</td>
</tr>
<tr>
<td>Not at all 1 2 3 4 5 6 7 Yes, as a central decision maker</td>
</tr>
<tr>
<td>4. How much have you been involved in decision making concerning the integration of companies?</td>
</tr>
<tr>
<td>Not at all 1 2 3 4 5 6 7 Yes, as a central decision maker</td>
</tr>
<tr>
<td>5. In how many mergers or acquisitions has your company participated during the 5 years before this acquisition?</td>
</tr>
<tr>
<td>0-1 2-4 5-7 8-10 11-</td>
</tr>
<tr>
<td>6. In how many mergers or acquisitions have you personally participated during the 10 years before this acquisition?</td>
</tr>
<tr>
<td>0-1 2-4 5-7 8-10 11-</td>
</tr>
</tbody>
</table>
Background of the Company and the Industry

7. Please circle on a scale from 1 to 7 the extent to which you agree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The two companies cooperated before the acquisition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) The companies were competitors before the acquisition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) The acquiring company invested heavily in R&amp;D</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) The acquired company invested heavily in R&amp;D</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

8. How has the industry developed after the integration?

<table>
<thead>
<tr>
<th>Statement</th>
<th>1 2 3 4 5 6 7</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Competition has decreased considerably</td>
<td></td>
<td>Competition has increased considerably</td>
</tr>
<tr>
<td>b) Structure of the industry has not changed at all</td>
<td></td>
<td>Structure of the industry has changed radically</td>
</tr>
<tr>
<td>c) Technological development has been very slow</td>
<td></td>
<td>Technological development has been very rapid</td>
</tr>
</tbody>
</table>

Outcome of the Integration

9. How would you describe the current degree of integration between the companies in the following operations?

<table>
<thead>
<tr>
<th>Operation</th>
<th>1 2 3 4 5 6 7</th>
<th>Total Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management and control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Sales and marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Research and development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Finance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. When evaluating the current situation, have synergistic benefits (e.g. cost savings or efficiency improvements) been achieved by the integration of different operations? 

<table>
<thead>
<tr>
<th>Operation</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Production</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Research and development</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e) Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

11. In your opinion, has knowledge transfer resulted in benefits in the following operations? 

<table>
<thead>
<tr>
<th>Operation</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Production</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Research and development</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e) Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

12. In your opinion, which company has benefited more from synergistic benefits? 

<table>
<thead>
<tr>
<th>Company</th>
<th>Acquirer</th>
<th>Acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

13. In your opinion, which company has benefited more from knowledge transfer? 

<table>
<thead>
<tr>
<th>Company</th>
<th>Acquirer</th>
<th>Acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

14. As a result of the acquisition, have there been following organizational problems in the acquiring company? 

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Uncertainty about the future</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Lack of motivation</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Increase in absenteeism</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Decrease in productivity</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e) Resistance to change</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f) Sabotage</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g) Loss of key persons</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

15. As a result of the acquisition, have there been following organizational problems in the acquired company? 

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Uncertainty about the future</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Lack of motivation</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Increase in absenteeism</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Decrease in productivity</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e) Resistance to change</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f) Sabotage</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g) Loss of key persons</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
16. In your opinion, have there been problems in cooperation between the companies?  

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Different opinions</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Cooperation problems</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Conflicts</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Mistrust between the employees of two companies</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

17. Please circle on a scale from 1 to 7 the extent to which you agree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost the whole top management of the acquiring company has remained in the company after the acquisition.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Almost the whole top management of the acquired company has remained in the company after the acquisition.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

18. Please estimate how the acquisition has affected the acquiring company.

<table>
<thead>
<tr>
<th>Factor</th>
<th>No impact</th>
<th>A great impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing significantly the size of the company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Achieving new growth business</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Increasing the production capacity</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of fixed costs (e.g. administration costs, IT, etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of operating costs (e.g. labour costs, manufacturing costs etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring new business line(s) for the company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Obtaining inexpensive labour from new geographical areas</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Gaining access to new geographical markets</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Selling acquirer’s existing products to target’s customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Selling target’s existing products to acquirer’s customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring patents or other immaterial rights</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring skilled personnel</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring organizational know-how</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Gaining control over the supply chain</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of competition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

19. Please describe the development of the following factors after the acquisition.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Significantly weakened</th>
<th>Significantly improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating profit % of the acquiring company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Operating profit % of the acquired company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Productivity of the acquiring company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Productivity of the acquired company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Market share of the acquiring company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Market share of the acquired company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
20. CONSOLIDATION AND RESTRUCTURING. The following questions are designed to assess rationalization and restructuring measures that have been implemented as a result of the acquisition.

<table>
<thead>
<tr>
<th>Please give a ROUGH ESTIMATE of the proportion of the closed or resold operations of the acquired business</th>
<th>0%</th>
<th>1-10%</th>
<th>11-30%</th>
<th>31-50%</th>
<th>51-70%</th>
<th>71-90%</th>
<th>91-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of R&amp;D personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other R&amp;D capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of manufacturing workforce cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other manufacturing capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of distribution and logistics personnel cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other distribution capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of sales and marketing personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other sales and marketing capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% administrative personnel cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other administrative services capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Please give a ROUGH ESTIMATE of the proportion of the closed or resold operations of the business units of your company that operate in the same industry as the acquired business.</th>
<th>0%</th>
<th>1-10%</th>
<th>11-30%</th>
<th>31-50%</th>
<th>51-70%</th>
<th>71-90%</th>
<th>91-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of R&amp;D personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other R&amp;D capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of manufacturing workforce cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other manufacturing capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of distribution and logistics personnel cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other distribution capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of sales and marketing personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other sales and marketing capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% administrative personnel cut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of other administrative services capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To what extent have you used resources from the acquired business to assist your existing business

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of acquired business’ product innovation capabilities</td>
<td>1</td>
</tr>
<tr>
<td>Use of acquired business’ know-how in manufacturing processes</td>
<td>1</td>
</tr>
<tr>
<td>Use of acquired business’ sales and marketing expertise</td>
<td>1</td>
</tr>
<tr>
<td>Use of acquired business’ suppliers’ relationship</td>
<td>1</td>
</tr>
<tr>
<td>Use of acquired business’ distribution and logistics expertise</td>
<td>1</td>
</tr>
</tbody>
</table>
### Cultural Differences

21. How would you describe the cultural differences between the companies before the acquisition in the following areas?

<table>
<thead>
<tr>
<th>Area</th>
<th>No differences</th>
<th>Significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Production</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d) Research and development</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e) Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f) Company values in general</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

22. How would you describe the cultural differences between the companies at this moment?

<table>
<thead>
<tr>
<th>Area</th>
<th>No differences</th>
<th>Significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Management and control</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b) Sales and marketing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c) Production</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>d) Research and development</td>
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<td></td>
</tr>
<tr>
<td>e) Finance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f) Company values in general</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

23. In your opinion, how much did the values of the decision makers of the acquiring and the acquired company differ before the acquisition?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

24. In your opinion, how much do the values of the decision makers of the acquiring and the acquired company differ at this moment?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

25a. How would you describe the culture of the acquiring company before the acquisition?\(^{107}\)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak belief in own competitiveness</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong belief in own competitiveness</td>
</tr>
<tr>
<td>Multiculturalism</td>
<td>1 2 3 4 5 6 7</td>
<td>Uniculturalism</td>
</tr>
<tr>
<td>Weak ties to suppliers and customers</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong ties to suppliers and customers</td>
</tr>
<tr>
<td>Weak identity</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong identity</td>
</tr>
<tr>
<td>No sense of belonging together</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong sense of belonging together</td>
</tr>
<tr>
<td>No readiness for change</td>
<td>1 2 3 4 5 6 7</td>
<td>Great readiness for change</td>
</tr>
</tbody>
</table>

\(^{107}\) This version of the questions related to the acquiring firm's culture was used in the 1\(^{st}\) and 2\(^{nd}\) data collection round.
25b. How would you describe the culture of the *acquired company* before the acquisition?

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale 1-7</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak belief in own competitiveness</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong belief in own competitiveness</td>
</tr>
<tr>
<td>Multiculturalism</td>
<td>1 2 3 4 5 6 7</td>
<td>Uniculturalism</td>
</tr>
<tr>
<td>Weak ties to suppliers and customers</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong ties to suppliers and customers</td>
</tr>
<tr>
<td>Weak identity</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong identity</td>
</tr>
<tr>
<td>No sense of belonging together</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong sense of belonging together</td>
</tr>
<tr>
<td>No readiness for change</td>
<td>1 2 3 4 5 6 7</td>
<td>Great readiness for change</td>
</tr>
</tbody>
</table>

---

How would you describe the culture of the *acquiring company* before the acquisition?

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale 1-7</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Weak belief in own competitiveness</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong belief in own competitiveness</td>
</tr>
<tr>
<td>b) Multiculturalism</td>
<td>1 2 3 4 5 6 7</td>
<td>Uniculturalism</td>
</tr>
<tr>
<td>c) Weak ties to suppliers and customers</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong ties to suppliers and customers</td>
</tr>
<tr>
<td>d) Contains many different cultural groups</td>
<td>1 2 3 4 5 6 7</td>
<td>Contains few different cultural groups</td>
</tr>
<tr>
<td>e) High level of valuing cultural diversity</td>
<td>1 2 3 4 5 6 7</td>
<td>Low level of valuing cultural diversity</td>
</tr>
<tr>
<td>f) High tolerance of cultural diversity</td>
<td>1 2 3 4 5 6 7</td>
<td>Low tolerance of cultural diversity</td>
</tr>
<tr>
<td>g) Multiculturalism is encouraged</td>
<td>1 2 3 4 5 6 7</td>
<td>Uniculturism is encouraged</td>
</tr>
<tr>
<td>h) Weak identity</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong identity</td>
</tr>
<tr>
<td>i) No sense of belonging together</td>
<td>1 2 3 4 5 6 7</td>
<td>Strong sense of belonging together</td>
</tr>
<tr>
<td>j) Great readiness for change</td>
<td>1 2 3 4 5 6 7</td>
<td>No readiness for change</td>
</tr>
<tr>
<td>k) High level of flexibility</td>
<td>1 2 3 4 5 6 7</td>
<td>Low level of flexibility</td>
</tr>
<tr>
<td>l) High level of creativity</td>
<td>1 2 3 4 5 6 7</td>
<td>Low level of creativity</td>
</tr>
</tbody>
</table>

---

How would you describe the culture of the *acquired company* before the acquisition?

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale 1-7</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Weak belief in own competitiveness</td>
<td>1 2 3 4 5 6 7</td>
<td>Very strong belief in own competitiveness</td>
</tr>
<tr>
<td>b) Contains many different cultural groups</td>
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<td>Contains few different cultural groups</td>
</tr>
<tr>
<td>c) High level of valuing cultural diversity</td>
<td>1 2 3 4 5 6 7</td>
<td>Low level of valuing cultural diversity</td>
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<tr>
<td>d) High tolerance of cultural diversity</td>
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<td>e) Multiculturalism is encouraged</td>
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</tr>
<tr>
<td>f) Multiculturalism</td>
<td>1 2 3 4 5 6 7</td>
<td>Uniculturalism</td>
</tr>
</tbody>
</table>

---

108 This version of the questions related to the acquired firm’s culture was used in the 1st and 2nd data collection round.
109 Due to convergent validity problems related to the questions 25a, this updated version of the questions related to the acquiring firm’s culture was used in the 3rd data collection round instead of the questions 25a.
110 Due to convergent validity problems related to the questions 25b, this updated version of the questions related to the acquired firm’s culture was used in the 3rd data collection round instead of the questions 25b.
| g) Weak ties to suppliers and customers | 1 2 3 4 5 6 7 | Very strong ties to suppliers and customers |
| h) Weak identity | 1 2 3 4 5 6 7 | Strong identity |
| i) No sense of belonging together | 1 2 3 4 5 6 7 | Strong sense of belonging together |
| j) Great readiness for change | 1 2 3 4 5 6 7 | No readiness for change |
| k) High level of flexibility | 1 2 3 4 5 6 7 | Low level of flexibility |
| l) High level of creativity | 1 2 3 4 5 6 7 | Low level of creativity |

| 26. How did the personnel of the acquiring company view the acquisition? | Very negative | Very positive |
| 27. How did the personnel of the acquired company view the acquisition? | 1 2 3 4 5 6 7 |
| 28. How did the personnel of the acquiring company view the practices and values of the acquired company? | 1 2 3 4 5 6 7 |
| 29. How did the personnel of the acquired company view the practices and values of the acquiring company? | 1 2 3 4 5 6 7 |

| 30. To what extent has the personnel of the acquiring company wanted to preserve its own culture? | Not at all | Very much |
| 31. To what extent has the personnel of the acquired company wanted to preserve its own culture? | 1 2 3 4 5 6 7 |
| 32. To what extent have the values of the acquiring company dominated in the integration process? | 1 2 3 4 5 6 7 |
| 33. To what extent has new culture shared by both companies been created after the acquisition? | 1 2 3 4 5 6 7 |
| 34. To what extent has new identity shared by both companies been created after the acquisition? | 1 2 3 4 5 6 7 |

**Management of the Integration Process**

35. How would you describe the amount of changes made in the acquiring company?
No changes | 1 2 3 4 5 6 7
Significant changes

36. How would you describe the amount of changes made in the acquired company?
No changes | 1 2 3 4 5 6 7
Significant changes
37. Under how tight control has the acquired company been operating after the acquisition?

Extremely tight control independently

38. Have there been overlapping operations in the organizations?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

39. To which extent have the overlappings been eliminated?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
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<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

40. To which extent has there been tendency towards the standardization of practices?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
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<td>6</td>
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<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41. To which extent have the decisions been based on maximization of synergistic and other benefits (e.g. cost reductions)?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

42. How much has the possible organizational change resistance affected the decisions?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

43. In your opinion, how much effort has been made to justify the decisions made among the personnel?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44. In your experience, have there been different views among the managements (including both the acquiring and acquired company managers) concerning the decisions?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45. Have there been open conflicts between the managers of the acquiring and acquired companies?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

46. In your opinion, how much have the management's decisions affected the outcome of the integration process?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47. In your opinion, to which extent can the management control the integration process?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

48. The practices have been standardized by changing the old practices to better fit each other

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

49. The changes have been based on acquiring company’s practices

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

50. The schedule for changes has been extremely slow

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

51. The management of the acquirer has dominated the integration decisions

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

52. The integration process has not proceeded in accordance with the original plan

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

53. The management’s decisions have not been characterized by

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
situation-specific considerations | decisions have been characterized by situation-specific considerations

<table>
<thead>
<tr>
<th>Total failure</th>
<th>Great success</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

54. In your opinion, what is the outcome of the acquisition?

55. In your opinion, how has the integration of the organizations succeeded?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

56. In your opinion, how have cultural differences of the organizations affected the success/failure of the integration?

57. In your opinion, how much does the success of an acquisition depend on the management’s actions?
Please answer only if you worked in the acquiring company

Please use 1-7 scale to evaluate the importance of the following motives for the acquisition decision.

<table>
<thead>
<tr>
<th>Motive</th>
<th>Irrelevant</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling a fast way to increase the company size</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring new growth business</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Increasing the production capacity</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of fixed costs (e.g. administration costs, IT, etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of operating costs (e.g. labour costs, manufacturing costs etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring new business line(s) for the company</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Obtaining inexpensive labour from new geographical areas</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Gaining access to new geographical markets</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Selling acquirer’s existing products to target’s customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Selling target’s existing products to acquirer’s customers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring patents or other immaterial rights</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring skilled personnel</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring organizational know-how</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Acquiring technological capabilities</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Gaining control over the supply chain</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Reduction of competition</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Responding to competitors’ moves</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Responding to pressures from stakeholders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Please give a rough estimate regarding the financing of the acquisition.

<table>
<thead>
<tr>
<th>Source of financing</th>
<th>Share of total, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares of the acquiring company</td>
<td></td>
</tr>
<tr>
<td>Shares of a new company to be established</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
</tr>
<tr>
<td>Debt from the acquiring corporation</td>
<td></td>
</tr>
<tr>
<td>Debt from outside the corporation</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Did you use following outside specialists in the acquisition process?

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111 This part was added to the questionnaire for the 2nd data collection round. However, referring to confidentiality reasons, many firms declined to answer the questions in this part. Therefore, the part was excluded in the 3rd data collection round. The questions are not included in any of the analyses of the thesis.
If outside specialists were used, please circle on a scale from 1 to 7 the extent to which you agree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside specialists identified potential acquisition targets</td>
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<tr>
<td>Outside specialists evaluated the value of the acquisition target</td>
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<td>Outside specialists participated in the acquisition negotiations</td>
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<td>Outside specialists gave legal advice</td>
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<tr>
<td>Outside specialists helped in financial issues</td>
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<tr>
<td>In total, outside specialists provided valuable help for us in the pre-acquisition process</td>
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<tr>
<td>In total, outside specialists provided valuable help for us in the integration process</td>
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<td>Without outside specialists it would have been very difficult to undertake this acquisition</td>
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<td>At least one venture capitalist used the deal as its exit strategy</td>
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</tbody>
</table>

Please estimate following key figures of the acquiring company for the year before the acquisition (-1), for the year of acquisition and for 1 and 2 years after the acquisition.

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt ratio (total debt divided by total assets)</th>
<th>Operating income divided by net sales</th>
<th>R&amp;D expenditure as % of net sales</th>
<th>Return on investment</th>
<th>Net sales</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year -1</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>Acq. Year</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>Year +1</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>Year +2</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____%</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>


166. GYÖNGYI KOVÁCS: Corporate Environmental Responsibility in Demand Networks. Helsingfors 2006.


